L9 ANSWER 23 OF 23 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1967:85867 CAPLUS

DOCUMENT NUMBER: 66:85867

TITLE: Synthesis and fragmentation of substituted

bicyclo-[3.1.0]-2-hexanones. II. (.+-.)-iso-trans-Chrysanthemic and (.+-.)-trans-chyrsanthemic acids

AUTHOR(S): Julia, Sylvestre; Julia, Marc; Linstrumelle, Gerard

CORPORATE SOURCE: Ecole Natl. Super. Chim., Paris, Fr.

SOURCE: Bull. Soc. Chim. Fr. (1966), (11), 3499-507

CODEN: BSCFAS

DOCUMENT TYPE: Journal LANGUAGE: French

70%

GI For diagram(s), see printed CA Issue.

ΑB cf. preceding abstr. A new acid, (.+-.)-iso-trans-chrysanthemic acid (I) and (.+-.)-trans-chrysanthemic acid (II) were prepd. Dimethyl-vinyl carbinol (86 g.) was added to 47 g. 53% NaH in mineral oil and 1.2 l. benzene, the mixt. refluxed 5 hrs., cooled to -15.degree., and 104 ml. isobutyryl chloride in 50 ml. benzene added at 0 to 4.degree.. was left overnight at room temp., added to water, and extd. with ether to give 108 g. III, b10 39.degree., n22.5D 1.4113. III (78 g.) was added dropwise to 24 g. 53% NaH in mineral oil and 160 ml. toluene at 110.degree., the mixt. kept 2 hrs. at 110.degree., cooled, 10 ml. MeOH added, and the mixt. added to ice, washed with ether, and acidified with 2N HCl to give 64 g. IV, b0.6 91.degree., n23.5D 1.4487, amide m. 73.degree. (ether-petroleum ether). IV was also prepd. from 2,2,5-trimethyl-4-hexen-1-al (V) and Ag2O (85% yield) and by sapon. of 2,2,5-trimethyl-4-hexenenitrile (VI) in ethylene glycol (85% yield). was prepd. by the method of Stork and Dowd (CA 59, 7383a). Addn. of isobutyronitrile (VII) to a mixt. of PhLi and Et2NH in ether and

of this mixt. With isoprene hydrobromide hydrate (VIII) gave 62% VI, b22 86.degree., n18D 1.4351. VI was also prepd. in 96% yield from EtMgBr, Et2NH, VII, and VIII and in 87% yield from VII, isoprene hydrochlor, and NaNH2 in benzene. A soln. of 12 g. Me iodide in 20 ml. ether was added slowly to 1.1 g. Li in 20 ml. ether. To this was added 2.6 g. IV in 10 ml. ether, the mixt. stirred overnight, ice-water added, and extd. with ether to give 2.32 g. IXa (X = Me)(X), b18 84.degree., n20D 1.44-66, also prepd. in 76% yield by treatment of VI with EtMgI in toluene. IV and (COCl)2 in ligroine gave IXa (X = Cl) (XI). XI and CH2N2 gave IXa (X = CHN2) (XII). XII in cyclohexane treated with Cu powder at reflux gave

XIII, bl2 75.degree., n22.5D 1.4595, oxime (XIV) m. 90-1.degree. (ether-petroleum ether). XIV (8.61 g.) was added in small portions over 30 min. to 16.8 g. PCl5 in 200 ml. anhyd. ether at -3.degree. (very exothermic reaction). The mixt. was stirred overnight at room temp., filtered, and the solid added to ice and extd. with CHCl3 to give 3% XV, m. 154.degree. (benzene-ligroine). The ether filtrate was washed with cold NaHCO3 soln., water, dried, and concd. to give 77% of a mixt. (b0.5 58-9.degree., n20D 1.4645) of XVI and XVII in approx. 4:1 ratio, and 5% XVIII, b0.7 61.degree., n24D 1.4615. XVIII decompd. to XVI and XVII when subjected to gas chromatog. Similarly, XIV was treated with PCl5 in the presence of pyridine (1.6 ml. pyridine/1.6 g. PCl5), and the ether residue

chromatographed on alumina to give 73% of a 3:2 mixt. of XVI and XVII (petroleum ether eluate) and 11% XIX, m. 111.degree. (C6H6-ligroine). Treatment of XIV with tosyl chloride in pyridine at 0.degree., then 1 hr.

at room temp. and 1 hr. at 100.degree. gave 48% XVI-XVII and 50% XIX. XVI and XVII have the cis configuration. Redn. of XVI and XVII with Adams catalyst gave cis-dihydrochrysanthemonitrile. A mixt. of XVI and XVII (310 mg.), 5 mg. p-toluenesulfonic acid (XX), and 5 ml. xylene was refluxed 2 hrs. to give a 9:1 mixt. of XVI and XVII. Sapon. of XVI-XVII (3:2) (24 hrs. reflux with KOH in ethylene glycol) gave 76% of a mixt. (b0.4 97-8.degree.) of I and II. Esterification of this mixt. with CH2N2 gave a mixt. contg. 9% iso-cis-, 45% iso-trans-, 8% cis-, and 38% trans-methyl chrysanthemate. Redn. of this mixt. gave cis- and trans-methyl dihydrochrysanthemate. The I-II mixt. (0.6 g.) refluxed 1.5 hrs. in 15 ml. xylene with 5 mg. XX gave 0.54 g. pure II. 3,3,6-trimethyl-6-hydroxyheptanenitrile (10 g.) in 4 ml. pyridine was added at 0.degree. 7.4 g. methanesulfonyl chloride, the mixt. cooled overnight, added to ice, and extd. with ether to give the methanesulfonate (XXI). XXI (1.25 g. crude) in 3 ml. dimethylformamide was added dropwise to 0.24 g. 50% NaH in mineral oil and 5 ml. dimethylformamide, the mixt. cooled, added to ice, and extd. with ether give dihydrochrysanthemonitrile (reaction temp., time (hrs.), % yield, and cis/trans ratio given): 20.degree., 5, 86, 60/40; 65.degree., 5, 86, 53/47; 100.degree., 2, 75, 46/54; 125.degree., 1/4, 70, 33% cis, 37% trans, 30% unidentified. Redn. of 95 mg. of I-II mixt. with Adams catalyst gave XXIIa (X = H, R = H), p-phenylphenacyl ester m. 100-1.degree. (MeOH). A soln. of 5 g. II in 50 ml. anhyd. ether satd. at 0.degree. with HCl and cooled overnight gave 95% XXIIa (X = Cl, R = H) (XXIII). A mixt. of ethyl and tert-amyl chrysanthemates treated with HCl gave XXIII ethyl ester (XXIV) and XXIII in an amt. corresponding to the amyl ester. Similarly, trans-ethyl chrysanthemate and HCl in ether gave 90% XXIV, b0.8 86.degree., n21D 1.4558, also prepd. from XXIII and diazoethane. A mixt. of 74 ml. 1.5N Na tert-amylate in benzene and 19.6 g. ethyl chrysanthemate (XXV) (60% trans-40% cis) was refluxed 4 hrs., cooled, added to ice and extd. with ether to give 90% trans-esters contg. 3% cis-XXV, however the trans-esters contained 33% trans-XXV and 67% tert-amyl chrysanthemate (XXVI). The trans esters refluxed with alc. KOH gave chrysanthemic acid and pure XXVI, b0.8 85-8.degree., n24D 1.4576. XXV (30 g.) refluxed 72 hrs. in a soln. of 20.7 g. Na in 300 ml. alc. 25.5 g. trans-XXV, b0.6 70.degree., n20D 1.4556 (contg. 8% cis-ester). XXIV treated with bases, e.g. tert-BuOK, NaH in dimethylformamide, PhNEt2, or NaOEt, gave 70% XXV and 30% of the iso-isomer I. XXIV heated in C6H4Cl2 at 180.degree. gave the same results. XXIII heated with K in Et3COH at 20.degree., then heated 2 hrs. at 90.degree. (Brown, et al., CA 50, 14749e) gave 94% of a mixt. of 85% I and 15% II. I, m. 42-4.degree., amide m. 117-18.degree. (benzene), was sepd. from II by 2 recrystns. from pentane. Similarly, XXIV (4 hrs. at 85.degree.) gave 90% of a mixt. contg. 25% II and 75% I. 705-16-8P 7377-84-6P 13899-97-3P 13902-29-9P 13902-34-6P 13902-35-7P 14280-93-4P RL: SPN (Synthetic preparation); PREP (Preparation) (prepn. of)

Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2-methyl-1-propenyl)-,

to

IT

RN

CN

705-16-8 CAPLUS

(1R, 3R) -rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

RN 7377-84-6 CAPLUS

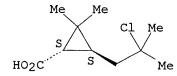
CN Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2-methyl-1-propenyl)-, ethyl ester, (1R,3S)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

RN 13899-97-3 CAPLUS

CN Cyclopropanecarboxylic acid, 3-(2-chloro-2-methylpropyl)-2,2-dimethyl-, trans- (8CI) (CA INDEX NAME)

Relative stereochemistry.



RN 13902-29-9 CAPLUS

CN Cyclopropanecarboxylic acid, 3-(2-chloro-2-methylpropyl)-2,2-dimethyl-, methyl ester, trans- (8CI) (CA INDEX NAME)

Relative stereochemistry.

RN 13902-34-6 CAPLUS

CN Cyclopropanecarboxylic acid, 3-(2-chloro-2-methylpropyl)-2,2-dimethyl-, ethyl ester, cis- (8CI, 9CI) (CA INDEX NAME)

Relative stereochemistry.

RN 13902-35-7 CAPLUS
CN Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2-methylpropenyl)-, tert-pentyl ester (8CI) (CA INDEX NAME)

RN 14280-93-4 CAPLUS

```
ANSWER 22 OF 23 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER:
                           1968:39156 CAPLUS
DOCUMENT NUMBER:
                           68:39156
TITLE:
                          Chrysanthemiic acid. XVIII. New biologically active
                          acid component related to chrysanthemic acid
AUTHOR(S):
                          Matsui, Masanao; Kitahara, Takeshi
CORPORATE SOURCE:
                          Univ. Tokyo, Tokyo, Japan
SOURCE:
                          Agric. Biol. Chem. (1967), 31(10), 1143-50
                          CODEN: ABCHA6
DOCUMENT TYPE:
                          Journal
LANGUAGE:
                          English
     For diagram(s), see printed CA Issue.
     The rethronyl esters of a series of cyclopropanecarboxylic acids were
     prepd. and tested for toxicity toward the housefly and mosquito. Thus,
     the following I (R3 = H) were prepd. (R, R1, R2, b.p./mm., and nD/temp.
     given): H, H, H, 85.degree. /9, 1.4379/21.degree.; H, Me, H,
     95-100.degree. /8, 1.4378/21.degree.; H, H, Me, 100-5.degree. /15
(anilide
     m. 106.degree.), 1.4400/16.degree. (rethronyl ester n16D 1.5140); Et, H,
     Me, (II) 95-100.degree. /50, 1.4430/17.degree.; H, Me, Me, 72-5.degree.
/2
     (anilide m. 176.degree.), -; and Et, Me, Me (III) 75-80.degree. /11, -.
     II and III were obtained via .beta.-methyl-.alpha.-valerolactone, b6
     80-3.degree., n25D 1.4330, and .beta.-.alpha.-dimethyl-.alpha.-
     valerolactone, b11 98.degree., resp. I (R = H, R1 = R2 = R3 = Me) (IV), m. 121.degree. (rethronyl ester, n17D 1.5091), was prepd. by treatment of
     Me2C:CMe2 with N2CHCO2Et in the presence of CuSO4 catalyst, and
     subsequent alk. hydrolysis of the Et ester. Phys. consts. for similarly prepd. I (R1 = Me) are given in the table. V (b10 120-25.degree.;
anilide
     m. 117-18.degree., n16D 1.4565; rethronyl ester n16D 1.5000) was prepd.
     from IV by the Arndt-Eistert reaction. [TABLE OMITTED] Alkylation of
     Me2C: CHCO2Et with iso-PrBr and NaNH2, and subsequent treatment with
NaOEt,
     and then sapon. gave Me2C:C(Pr-iso)CO2H, b11 100.degree.; anilide m.
     111.degree., n15D 1.4360; rethronyl ester, n22D 1.4931. I (R = H, R1 =
R2
     = Me, R3 = CO2Me) (VI) (b0.06 120.degree., n13D 1.4634; rethronyl ester
     n14D 1.4940) was prepd. by redn. of Et .alpha.-methylsenecioate with
     LiAlH4; subsequent acetylation gave trimethallyl acetate (VII), b45
     88-92.degree., n14D 1.14365. N2CHCO2Et was added to VII to give I(R =
Et,
     R1 = R2 = Me, R3 = CH2OAc), b10 115-22.degree., n14D 1.4470, which was
     hydrolyzed with an aq. alk. soln. and, without isolation, oxidized with
     KMnO4 to I (R = H, R1 = R2 = Me, R3 = CO2H), m. 156.degree..
     Esterification with CH2N2 gave I (R = R1 = R2 = Me, R3 = CO2Me), b10
     100-2.degree., n19D 1.4500. Subsequent half-hydrolysis with KOH-MeOH
     yielded \tilde{I} (R = H, R1 = R2 = Me, R3 = CO2Me), b0.06 120.degree., n13D
     1.4634; rethronyl ester n14D 1.4940. VIII (Feist's acid, m.
     199-200.degree.; rethronyl ester, n14D 1.5120) was prepd. by the method
of
     Goss, et al. (CA 17: 1627). The rethronyl esters were prepd. by
     converting the acids (except VIII) to the corresponding acyl chlorides,
     followed by esterification with allethrolone (IX) in the presence of
     excess C5H5N. VIII was treated with Ac20 to give the anhydride, then
     mixed with IX to give a half-ester which was esterified with CH2N2.
     rethronyl ester of IV had the greatest toxicity. The correlation between
```

chem. structure and biol. reactivity is discussed.

IT 15589-30-7P 15589-31-8P 15589-33-0P 15589-34-1P 15589-35-2P 15591-18-1P 15641-58-4P 17214-86-7P 17214-87-8P 17219-23-7P 17219-24-8P 17219-29-3P 17219-30-6P 17219-32-8P 17219-33-9P 17219-34-0P 17219-35-1P 17219-37-3P 17219-38-4P 17219-39-5P 17219-40-8P 17219-41-9P 17219-42-0P 17219-44-2P 17219-45-3P 17219-46-4P 18611-84-2P 18611-90-0P 18611-91-1P 18718-20-2P 18718-21-3P 28518-39-0P 28758-81-8P RL: SPN (Synthetic preparation); PREP (Preparation) (prepn. of)

15589-30-7 CAPLUS RN

CN Cyclopropanecarboxylic acid, 2-methyl-, 2-methyl-4-oxo-3-(2-propenyl)-2cyclopenten-1-yl ester (9CI) (CA INDEX NAME)

$$H_2C = CH - CH_2$$
 O
 O
 O
 O
 O
 O
 O
 O

RN 15589-31-8 CAPLUS

CN Cyclopropanecarboxylic acid, 2,2,3,3-tetramethyl-, 2-methyl-4-oxo-3-(2propenyl)-2-cyclopenten-1-yl ester (9CI) (CA INDEX NAME)

$$H_2C = CH - CH_2$$
 O
 Me
 O
 Me
 Me
 Me
 Me
 Me
 Me
 Me

RN15589-33-0 CAPLUS

Cyclopropanecarboxylic acid, 3-ethyl-2,2-dimethyl-, 2-methyl-4-oxo-3-(2-CN propenyl)-2-cyclopenten-1-yl ester (9CI) (CA INDEX NAME)

$$H_2C = CH - CH_2$$
 $O = CH - CH_2$
 $O = CH_2$

RN15589-34-1 CAPLUS

CNCyclopropanecarboxylic acid, 2,2,3-trimethyl-, 2-methyl-4-oxo-3-(2propenyl)-2-cyclopenten-1-yl ester (9CI) (CA INDEX NAME)

$$H_2C = CH - CH_2$$

Me

O

Me

Me

Me

Me

Me

Me

RN 15589-35-2 CAPLUS

CN Cyclopropanecarboxylic acid, 2,2-dimethyl-3-propyl-, 2-methyl-4-oxo-3-(2-propenyl)-2-cyclopenten-1-yl ester (9CI) (CA INDEX NAME)

RN 15591-18-1 CAPLUS

CN Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(1-methylethyl)-, 2-methyl-4-oxo-3-(2-propenyl)-2-cyclopenten-1-yl ester (9CI) (CA INDEX NAME)

RN 15641-58-4 CAPLUS

CN Cyclopropanecarboxylic acid, 2,2,3,3-tetramethyl- (6CI, 8CI, 9CI) (CA INDEX NAME)

RN 17214-86-7 CAPLUS

CN Cyclopropanecarboxylic acid, 2,2,3-trimethyl-, ethyl ester (8CI, 9CI)

(CA

INDEX NAME)

RN 17214-87-8 CAPLUS

CN Cyclopropanecarboxylic acid, 2,3-dimethyl-, ethyl ester (7CI, 8CI, 9CI) (CA INDEX NAME)

RN 17219-23-7 CAPLUS

CN Cyclopropanecarboxylic acid, 2,3-dimethyl- (8CI) (CA INDEX NAME)

RN 17219-24-8 CAPLUS

CN Cyclopropanecarboxylic acid, 2,2,3-trimethyl- (8CI, 9CI) (CA INDEX NAME)

RN 17219-29-3 CAPLUS

CN Cyclopropanecarboxylic acid, 3-ethyl-2,2-dimethyl- (8CI) (CA INDEX NAME)

RN 17219-30-6 CAPLUS
CN Cyclopropanecarboxylic acid, 3-ethyl-2,2-dimethyl-, ethyl ester (8CI, 9CI)
(CA INDEX NAME)

RN 17219-32-8 CAPLUS CN Cyclopropanecarboxylic acid, 2,2-dimethyl-3-propyl- (8CI) (CA INDEX NAME)

RN 17219-33-9 CAPLUS
CN Cyclopropanecarboxylic acid, 2,2-dimethyl-3-propyl-, ethyl ester (8CI)
(CA INDEX NAME)

RN 17219-34-0 CAPLUS CN Cyclopropanecarboxylic acid, 3-isopropyl-2,2-dimethyl- (8CI) (CA INDEX NAME)

RN 17219-35-1 CAPLUS
CN Cyclopropanecarboxylic acid, 3-isopropyl-2,2-dimethyl-, ethyl ester (7CI, 8CI) (CA INDEX NAME)

RN 17219-37-3 CAPLUS

CN [1,1'-Bicyclopropyl]-2-carboxylic acid, 3,3-dimethyl- (9CI) (CA INDEX NAME)

RN 17219-38-4 CAPLUS

CN [Bicyclopropyl]-2-carboxylic acid, 3,3-dimethyl-, ethyl ester (8CI) (CA INDEX NAME)

RN 17219-39-5 CAPLUS

CN Cyclopropanecarboxylic acid, 2-ethyl-2,3,3-trimethyl- (8CI, 9CI) (CA INDEX NAME)

RN 17219-40-8 CAPLUS

CN Cyclopropanecarboxylic acid, 2-ethyl-2,3,3-trimethyl-, ethyl ester (8CI) (CA INDEX NAME)

RN 17219-41-9 CAPLUS

CN Cyclopropanecarboxylic acid, 2,2,3-trimethyl-3-phenyl- (8CI, 9CI) (CA INDEX NAME)

RN 17219-42-0 CAPLUS

CN Cyclopropanecarboxylic acid, 2,2,3-trimethyl-3-phenyl-, ethyl ester (8CI) (CA INDEX NAME)

RN 17219-44-2 CAPLUS

CN Cyclopropanecarboxylic acid, 2-[(acetyloxy)methyl]-2,3,3-trimethyl-, ethyl

ester (9CI) (CA INDEX NAME)

RN 17219-45-3 CAPLUS

CN 1,2-Cyclopropanedicarboxylic acid, 1,3,3-trimethyl- (8CI, 9CI) (CA INDEX NAME)

RN 17219-46-4 CAPLUS

CN 1,2-Cyclopropanedicarboxylic acid, 1,3,3-trimethyl-, diethyl ester (8CI) (CA INDEX NAME)

RN 18611-84-2 CAPLUS
CN Cyclopropanecarboxylic acid, 2,2-dimethyl-,
2-methyl-4-oxo-3-(2-propenyl)2-cyclopenten-1-yl ester (9CI) (CA INDEX NAME)

$$H_2C = CH - CH_2$$
 O
 Me
 O
 Me
 Me
 Me

RN 18611-90-0 CAPLUS
CN Cyclopropanecarboxylic acid, 2-ethyl-2,3,3-trimethyl-,

2-methyl-4-oxo-3-(2-propenyl)-2-cyclopenten-1-yl ester (9CI) (CA INDEX NAME)

$$H_2C = CH - CH_2$$
 O
 Me
 O
 Et
 Me
 Me
 Me
 Me
 Me
 Me

RN 18611-91-1 CAPLUS

CN Cyclopropanecarboxylic acid, 2,2,3-trimethyl-3-phenyl-, 2-methyl-4-oxo-3-(2-propenyl)-2-cyclopenten-1-yl ester (9CI) (CA INDEX NAME)

RN 18718-20-2 CAPLUS

CN Cyclopropanecarboxylic acid, 2,3-dimethyl-, ester with 2-allyl-4-hydroxy-3-methyl-2-cyclopenten-1-one (8CI) (CA INDEX NAME)

$$H_2C = CH - CH_2$$
 O
 Me
 O
 Me
 O
 Me
 O
 Me
 O
 O
 O

RN 18718-21-3 CAPLUS

CN [Bicyclopropyl]-2-carboxylic acid, 3,3-dimethyl-, ester with 2-allyl-4-hydroxy-3-methyl-2-cyclopenten-1-one (8CI) (CA INDEX NAME)

$$H_2C = CH - CH_2$$

$$O = CH -$$

RN 28518-39-0 CAPLUS

CN 1,2-Cyclopropanedicarboxylic acid, 1,3,3-trimethyl-, monomethyl ester (8CI) (CA INDEX NAME)

CM 1

CRN 17219-45-3 CMF C8 H12 O4

CM 2

CRN 67-56-1 CMF C H4 O

нзс-он

RN 28758-81-8 CAPLUS

CN 1,2-Cyclopropanedicarboxylic acid, 1,3,3-trimethyl-, methyl ester, ester with 2-allyl-4-hydroxy-3-methyl-2-cyclopenten-1-one (8CI) (CA INDEX NAME)

CM 1

CRN 29605-88-7 CMF C9 H12 O2

$$CH_2-CH$$
 CH_2

CM 2

CRN 17219-45-3 CMF C8 H12 O4

CM 3

CRN 67-56-1 CMF C H4 O

нзс-он

NEWS LOGIN

NEWS PHONE

NEWS WWW

```
Welcome to STN International! Enter x:X
LOGINID: ssspta1626amd
PASSWORD:
TERMINAL (ENTER 1, 2, 3, OR ?):2
                     Welcome to STN International
NEWS 1
                 Web Page URLs for STN Seminar Schedule - N. America
NEWS 2 Jan 25
                BLAST(R) searching in REGISTRY available in STN on the Web
NEWS 3 Jan 29
                FSTA has been reloaded and moves to weekly updates
NEWS 4 Feb 01 DKILIT now produced by FIZ Karlsruhe and has a new update
                 frequency
NEWS 5 Feb 19 Access via Tymnet and SprintNet Eliminated Effective 3/31/02
NEWS 6 Mar 08 Gene Names now available in BIOSIS
NEWS 7 Mar 22
                TOXLIT no longer available
NEWS 8 Mar 22
                 TRCTHERMO no longer available
NEWS 9 Mar 28 US Provisional Priorities searched with P in CA/CAplus
                 and USPATFULL
NEWS 10 Mar 28 LIPINSKI/CALC added for property searching in REGISTRY
NEWS 11 Apr 02 PAPERCHEM no longer available on STN. Use PAPERCHEM2
instead.
NEWS 12 Apr 08
                 "Ask CAS" for self-help around the clock
NEWS 13 Apr 09
                 BEILSTEIN: Reload and Implementation of a New Subject Area
NEWS 14 Apr 09
                 ZDB will be removed from STN
NEWS 15 Apr 19
                 US Patent Applications available in IFICDB, IFIPAT, and
IFIUDB
NEWS 16 Apr 22 Records from IP.com available in CAPLUS, HCAPLUS, and
ZCAPLUS
NEWS 17 Apr 22
                 BIOSIS Gene Names now available in TOXCENTER
NEWS 18 Apr 22
                 Federal Research in Progress (FEDRIP) now available
NEWS 19
         Jun 03
                 New e-mail delivery for search results now available
NEWS 20
         Jun 10
                 MEDLINE Reload
NEWS 21
         Jun 10
                 PCTFULL has been reloaded
NEWS 22 Jul 02 FOREGE no longer contains STANDARDS file segment
NEWS EXPRESS
              February 1 CURRENT WINDOWS VERSION IS V6.0d,
              CURRENT MACINTOSH VERSION IS V6.0a(ENG) AND V6.0Ja(JP),
              AND CURRENT DISCOVER FILE IS DATED 05 FEBRUARY 2002
NEWS HOURS
              STN Operating Hours Plus Help Desk Availability
NEWS INTER
              General Internet Information
```

Enter NEWS followed by the item number or name to see news on that specific topic.

Welcome Banner and News Items

All use of STN is subject to the provisions of the STN Customer agreement. Please note that this agreement limits use to scientific research. Use for software development or design or implementation of commercial gateways or other similar uses is prohibited and may

CAS World Wide Web Site (general information)

Direct Dial and Telecommunication Network Access to STN

result in loss of user privileges and other penalties.

FILE 'HOME' ENTERED AT 08:49:18 ON 18 JUL 2002

=> fil req

COST IN U.S. DOLLARS

SINCE FILE TOTAL ENTRY SESSION 0.21 0.21

FULL ESTIMATED COST

FILE 'REGISTRY' ENTERED AT 08:49:26 ON 18 JUL 2002 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

COPYRIGHT (C) 2002 American Chemical Society (ACS)

STRUCTURE FILE UPDATES: 17 JUL 2002 HIGHEST RN 439210-99-8 DICTIONARY FILE UPDATES: 17 JUL 2002 HIGHEST RN 439210-99-8

TSCA INFORMATION NOW CURRENT THROUGH January 7, 2002

Please note that search-term pricing does apply when conducting SmartSELECT searches.

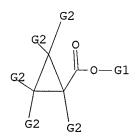
Crossover limits have been increased. See HELP CROSSOVER for details.

Calculated physical property data is now available. See HELP PROPERTIES for more information. See STNote 27, Searching Properties in the CAS Registry File, for complete details: http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf

=> Uploading 10053680.str

L1 STRUCTURE UPLOADED

=> d L1 HAS NO ANSWERS L1 STR



G1 Cb,Ak G2 H,X,Cb,Ak

Structure attributes must be viewed using STN Express query preparation.

=> s 11 ful

FULL SEARCH INITIATED 08:49:41 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 63313 TO ITERATE

100.0% PROCESSED 63313 ITERATIONS

26737 ANSWERS

SEARCH TIME: 00.00.04

L2 26737 SEA SSS FUL L1

=>

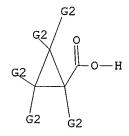
Uploading 10053680.str

L3 STRUCTURE UPLOADED

=> d

L3 HAS NO ANSWERS

L3 STR



G1 Cb, Ak

G2 H, X, Cb, Ak

Structure attributes must be viewed using STN Express query preparation.

=> s 13 ful

FULL SEARCH INITIATED 08:50:16 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 16561 TO ITERATE

100.0% PROCESSED 16561 ITERATIONS

5138 ANSWERS

TOTAL

SEARCH TIME: 00.00.01

L4 5138 SEA SSS FUL L3

=> fil caplus

COST IN U.S. DOLLARS SINCE FILE

ENTRY SESSION

FULL ESTIMATED COST 280.56 280.77

FILE 'CAPLUS' ENTERED AT 08:50:20 ON 18 JUL 2002 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS. COPYRIGHT (C) 2002 AMERICAN CHEMICAL SOCIETY (ACS)

Copyright of the articles to which records in this database refer is held by the publishers listed in the PUBLISHER (PB) field (available for records published or updated in Chemical Abstracts after December

26, 1996), unless otherwise indicated in the original publications. The CA Lexicon is the copyrighted intellectual property of the American Chemical Society and is provided to assist you in searching databases on STN. Any dissemination, distribution, copying, or storing of this information, without the prior written consent of CAS, is strictly prohibited.

FILE COVERS 1907 - 18 Jul 2002 VOL 137 ISS 3 FILE LAST UPDATED: 17 Jul 2002 (20020717/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

CAS roles have been modified effective December 16, 2001. Please check your SDI profiles to see if they need to be revised. For information on CAS roles, enter HELP ROLES at an arrow prompt or use the CAS Roles thesaurus (/RL field) in this file.

=> s 12/p L5 5008 L2/P

=> s 15 and 14 4148 L4 L6 1760 L5 AND L4

=> s 16 and catalyst? 747371 CATALYST? L7 139 L6 AND CATALYST?

=> d 1-139 ibib abs hitstr

```
L7 ANSWER 1 OF 139
ACCESSION NUMBER:
DOCUMENT NUMBER:
136:218618
TITLE:
compound
INVENTOR(S):
PATENT ASSIGNEE(S):
SOURCE:

L7 ANSWER 1 OF 139
CAPLUS COPYRIGHT 2002 ACS
APLUS COPYRIGHT 2002 ACS
APLUS COPYRIGHT 2002 ACS
136:218618
Process for producing or
APLUS COPYRIGHT 2002 ACS
APLUS COPYRIGHT 2
                                                                                                                                                                                                              Process for producing carbonyl or hydroxy
                                                                                                                                                                                                              Hagiya, Koji; Takano, Naoyuki; Kurihara, Akio
                                                                                                                                                                                                                Japan
U.S. Pat. Appl. Publ., 16 pp.
CODEN: USXXCO
  DOCUMENT TYPE:
LANGUAGE:
FAMILY ACC. NUM. COUNT:
PATENT INFORMATION:
                                                                                                                                                                                                           Patent
English
                                        PATENT NO.
                                                                                                                                                                                    KIND DATE
                                                                                                                                                                                                                                                                                                                                                              APPLICATION NO. DATE
                                        US 2002025906 A1 20020228 US 2001-925523 20010810
JP 2002201174 A2 20020716 JP 2001-241895 20010809
EP 1188735 A1 20020320 EP 2001-119369 20010810
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC,
```

PT, IE, SI, LT, LV, FI, RO
JP 2002201173 A2 20020716
JP 200220116 A2 20020716
JP 2002201146 A2 20020716
JP 2002201154 A2 20020716
JP 2002201147 A2 20020716
PRIORITY APPLN. INFO.: JP 2001-326075 JP 2001-326076 JP 2001-334334 JP 2001-334335 JP 2001-334335 P 2000-324277 A P 2000-328812 A P 2000-337150 A P 2000-337151 A P 2000-337151 A JP 2002201147 A2 20020716 JP 2001-334335 20011031
PRIORITY APPLN. INFO:: P 2000-24877 A 20000811
JP 2000-328812 A 20001027
JP 2000-328816 A 20001027
JP 2000-337150 A 20001106
JP 2000-337151 A 20001106
OTHER SOURCE(S): MARPAT 136:218618
AB Disclosed is a method for producing at least one compd. selected from a

from a carbonyl compd. and a hydroxy adduct compd. by an oxidative cleavage

addn. reaction of an olefinic double bond of an olefin compd., which contains reacting an olefin compd. with peroxide, using as a catalyst, at least one member selected from (a) tungsten, (b) molybdenum, or (c) a tungsten or molybdenum metal compd. contg, (ia) tungsten or (ib) molybdenum and (ii) an element of Group IIIB, IVB, or

or VIB excluding oxygen, and a catalyst compn. Thus, 2 g 30% ag. hydrogen peroxide soln. and 97 mg metallic tungsten were agitated at 60.degree. for 0.5 h, a soln. of 3.5 g isophorone and 25.8 g 30% ag. hydrogen peroxide was added dropwise over 20 min, and the mixt. was agitated at 95.degree. for 6 h to give 3,3-dimethyl-5-oxohexanoic

acid. IT

.
41301-44-4P 76842-27-8P 401910-16-5P
401910-17-6P
RL: IMF (Industrial manufacture); PREP (Preparation)
(process for producing carbonyl or hydroxy compd.)
41301-44-4 CAPLUS

GARDS
Cyclopropanecarboxylic acid, 3-formyl-2,2-dimethyl-, methyl ester,
(1R,3R)-rel- (9CI) (CA INDEX NAME)

L7 ANSWER 1 OF 139 CAPLUS COPYRIGHT 2002 ACS

ANSWER 1 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued) Relative stereochemistry.

76842-27-8 CAPLUS 1,2-Cyclopropanedicarboxylic acid, 3,3-dimethyl-, monomethyl ester rn Cn (9CI) (CA INDEX NAME)

RN 401910-16-5 CAPLUS
CN Cyclopropanecarboxylic acid,
3-(2-hydroproxyl-1-hydroxy-2-methylpropyl)2,2-dimethyl-, methyl ester, (1R,3R)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

RN 401910-17-6 CAPLUS
CN Cyclopropanecarboxylic acid,
3-(1,2-dihydroxy-2-methylpropyl)-2,2-dimethyl, methyl ester, (1R,3R)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

L7 ANSWER 2 OF 139 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 2002:145067 CAPLUS
DOCUMENT NUMBER: 136:340569
ITITLE: In Search of High Stereocontrol for the
Construction

of cis-Disubstituted Cyclopropane Compounds. Total Synthesis of a Cyclopropane-Configured Urea-PETT Analog That Is a HIV-1 Reverse Transcriptase

Hu, Wenhor Timmons, Daren J.; Doyle, Michael P. Department of Chemistry, University of Arizona, Tucson, AZ, 85721, USA
Organic Letters (2002), 4(6), 901-904
CODEN: ORLET7; ISSN: 1523-7060
American Chemical Society
Journal
English

Inhibitor AUTHOR(S): CORPORATE SOURCE:

SOURCE:

PUBLISHER:

DOCUMENT TYPE: LANGUAGE: GI

A new azetidine-ligated dirhodium(II) catelyst that possesses a 1-menthyl ester attachment provides significant diastereocontrol and AB high

enantiocontrol for the formation of cis-cyclopropane products from reactions of substituted styrenes with diazo esters. The prepn. of urea-PETT analog I is described.
417709-99-89-89-417709-90-19-417709-92-39

ΙT

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT

(Reactant or reagent) (high stereocontrol for construction of cis-disubstituted

(high statements)

cyclopropane
compds.)

RN 417709-89-8 CAPLUS
CN Cyclopropanecarboxylic acid, 2-(6-chloro-3-ethoxy-2-fluorophenyl)-,

Absolute stereochemistry. Rotation (+).

L7 ANSWER 2 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

417709-90-1 CAPLUS Cyclopropanecarboxylic acid, 2-(6-chloro-3-ethoxy-2-fluorophenyl)-, 1,1-dimethylethyl ester, (15,2R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

417709-92-3 CAPLUS %17/03-92-3 CAREDOS Cyclopropanecarboxylic acid, 2-(6-chloro-3-ethoxy-2-fluorophenyl)-, (18,2R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

IT 34703-00-9P 105367-35-9P 105367-37-1P
105367-39-3P 417709-79-6P 417709-80-9P
417709-81-0P 417709-82-1P 417709-83-2P
417709-84-3P 417709-85-4P 417709-86-5P
417709-87-6P 417709-88-7P 417709-91-2P
RL: SFN (Synthetic preparation) PREP (Preparation)
(high stereocontrol for construction of cis-disubstituted cyclopropane
compds.)
RN 34703-00-9 CAPLUS
CN Cyclopropanecarboxylic acid, 2-phenyl-, ethyl ester, (15,2R)- (9CI)
(CA

INDEX NAME)

Absolute stereochemistry. Rotation (+).

L7 ANSWER 2 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued) Absolute stereochemistry.

417709-80-9 CAPLUS Cyclopropanecarboxylic acid, 2-[4-(trifluoromethyl)phenyl]-, 1,1-dimethylethyl ester, (1R,2R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

417709-81-0 CAPLUS Cyclopropanecarboxylic acid, 2-(2-chlorophenyl)-, 1,1-dimethylethyl (1R, 2R) - (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 417709-82-1 CAPLUS CN Cyclopropanecarboxylic acid, 2-(2,6-dichlorophenyl)-, 1,1-dimethylethyl ester, (1R,2R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 417709-83-2 CAPLUS

L7 ANSWER 2 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

RN 105367-35-9 CAPLUS
CN Cyclopropanecarboxylic acid, 2-phenyl-, 1,1-dimethylethyl ester, (15,2R)-(9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

105367-37-1 CAPLUS Cyclopropanecarboxylic acid, 2-phenyl-, (1R,2S,5R)-5-methyl-2-(1-methylethyl)cyclohexyl ester, (1S,2R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

105367-39-3 CAPLUS Cyclopropanecarboxylic acid, 2-phenyl-, (15,2R,5S)-5-methyl-2-(1-methylethyl)cyclohexyl ester, (15,2R)- (9CI) (CA INDEX NAME)

RN 417709-79-6 CAPLUS CN Cyclopropanecarboxylic acid, 2-{4-methylphenyl}-, 1,1-dimethylethyl ester, (1R,2R)- (9CI) (CA INDEX NAME)

L7 ANSWER 2 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued) CN Cyclopropanecarboxylic acid, 2-(2,4,6-trimethylphenyl)-, 1,1-dimethylethyl ester, (1R,2R)- (9CI) (CA INDEX NAME)

RN 417709-84-J CN Cyclopropanecarboxylic ac-ester, (1s,2R)- (9CI) (CA INDEX NAME) 417709-84-3 CAPLUS Cyclopropanecarboxylic acid, 2-(4-methylphenyl)-, 1,1-dimethylethyl

417709-85-4 CAPLUS
Cyclopropanecarboxylic acid, 2-[4-(trifluoromethyl)phenyl]-,
1,1-dimethylethyl ester, (1S,2R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

417709-86-5 CAPLUS Cyclopropanecarboxylic acid, 2-(2-chlorophenyl)-, 1,1-dimethylethyl (15,2R) - (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 417709-87-6 CAPLUS CN Cyclopropanecarboxylic acid, 2-(2,6-dichlorophenyl)-, 1,1-dimethylethyl ester, (15,2R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 417709-88-7 CAPLUS CN Cyclopropanecarboxylic acid, 2-(2,4,6-trimethylphenyl)-, 1,1-dimethylethyl ester, (15,2R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

417709-91-2 CAPLUS
Cyclopropanecarboxylic acid, 2-(6-chloro-3-ethoxy-2-fluorophenyl)-,
1,1-dimethylethyl ester, (1R,2R)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

L7 ANSWER 3 OF 139 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 2002:62872 CAPLUS
DOCUMENT NUMBER: 156:27989
On the mechanism of the copper-catalyzed cyclopropanation reaction
AUTHOR(S): Rasmussen, Torbens Jensen, Jakob F.; Ostergaard, Niels; Tanner, David; Ziegler, Tom; Norrby,

Per-Ola CORPORATE SOURCE: Department of Medicinal Chemistry, Royal Danish

School

of Pharmacy, Copenhagen, 2100, Den. . Chemistry--A European Journal (2002), 8(1), SOURCE: 177-184

CODEN: CEUJED; ISSN: 0947-6539 Wiley-VCH Verlag GmbH Journal PUBLI SHER:

DOCUMENT TYPE: LANGUAGE:

MENT TYPE: Journal UAGE: English English The selectivity-dety, step in enantioselective copper-catalyzed cyclopropanation with diazo compds. has been studied by exptl. and computational methods. The addn. of the very reactive metallacarbene intermediate in an early transition state to the substrate alkene is concerted but strongly asynchronous, with substantial cationic acter

on one alkene carbon in the neighborhood of the transition state. Evidence from isotope effects and Hammett studies supports the nature

nature or the transition state. Formation of a metallacyclobutane intermediate by a [2+2] addn. is kinetically disfavored. Ligand-substrate interactions influencing the enantio- and diastereoselectivity have been identified

and the preferred orientation of the alkene substrate during the

addn. is

ΙŤ

suggested. 1759-53-1, Cyclopropanecarboxylic acid RL: FMU (Formation, unclassified), FRP (Properties), FORM (Formation, nonpreparative)
{computational study; exptl. and computational study of the

mechanism

of enantioselective copper-catalyzed cyclopropanation of alkenes with

diazo compds.) 1759-53-1 CAPUS Cyclopropanecarboxylic acid (6CI, 7CI, 8CI, 9CI) (CA INDEX NAME)

Δ, С02Н

946-38-3P 34716-60-4P 67478-53-9P 70461-59-5P 70461-62-0P 207279-34-3P 207279-35-4P 395676-47-6P 395676-59-2P 406459-08-3P 406459-09-4P 406459-10-7P 406459-11-3P 406459-12-9P RL: SPN (Synthetic preparation); PREP (Preparation)

L7 ANSWER 2 OF 139 CAPLUS COPYRIGHT 2002 ACS (COntinued)
REFERENCE COUNT: 17 THERE ARE 17 CITED REFERENCES AVAILABLE FOR RECORD. ALL CITATIONS AVAILABLE IN THE RE

FORMAT

(CA INDEX NAME)

34716-60-4 CAPLUS Cyclopropanecarboxylic acid, 2-phenyl-, ethyl ester, (1R,2R)- (9CI) INDEX NAME)

Absolute stereochemistry. Rotation (-).

67478-53-9 CAPLUS Cyclopropanecarboxylic acid, 2-(4-methoxyphenyl)-, ethyl ester, (1R,2S)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

70461-59-5 CAPLUS Cyclopropanecarboxylic acid, 2-(4-methylphenyl)-, ethyl ester, (1R,2S)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

70461-62-0 CAPLUS RN 70461-62-0 CAPLUS
CN Cyclopropanecarboxylic acid, 2-(4-nitrophenyl)-, ethyl ester,
(lR,2S)-rel(9CI) (CA INDEX NAME)

Relative stereochemistry.

RN 207279-34-3 CAPLUS CN Cyclopropanecarboxylic acid, 2-(4-methoxyphenyl)-, ethyl ester, (1R, ZR)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 207279-35-4 CAPLUS
CN Cyclopropanecarboxylic acid, 2-(4-methylphenyl)-, ethyl ester,
(1R,2R)-(9CI) (CA INDEX NAME)

Absolute stereochemistry.

395676-47-8 CAPLUS Cyclopropanecarboxylic acid, 2-[4-(trifluoromethyl)phenyl]-, ethyl

L7 ANSWER 3 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)
RN 406459-10-7 CAPLUS
CN Cyclopropane-2,2-d2-carboxylic acid, 3-phenyl-, ethyl ester,
(1R,3S)-rel(9CI) (CA INDEX NAME)

Relative stereochemistry.

RN CN (9CI) 406459-11-8 CAPLUS Cyclopropane-2-d-carboxylic acid, 3-phenyl-, ethyl ester, (1R,2R)-(CA INDEX NAME)

Absolute stereochemistry.

RN 406459-12-9 CAPLUS CN Cyclopropane-2-d-carboxylic acid, 2-phenyl-, ethyl ester, (1R, 2S)-rel-(SCI) (CA INDEX NAME)

Relative stereochemistry.

REFERENCE COUNT: FOR THIS

42 THERE ARE 42 CITED REFERENCES AVAILABLE RECORD. ALL CITATIONS AVAILABLE IN THE RE

FORMAT

ANSWER 3 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued) (1R,2R) - (9CI) (CA INDEX NAME) Absolute stereochemistry.

L7

 $\begin{tabular}{ll} 395676-59-2 & CAPLUS \\ Cyclopropanecarboxylic acid, $2-[4-(trifluoromethyl)phenyl]-, ethyl \\ \end{tabular}$ (1R, 2S) - rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

406459-08-3 CAPLUS Cyclopropanecarboxylic acid, 2-(4-nitrophenyl)-, ethyl ester, (1R,2R)-(SCI) (CA INDEX NAME)

Absolute stereochemistry.

406459-09-4 CAPLUS Cyclopropane-2,2-d2-carboxylic acid, 3-phenyl-, ethyl ester, (1R,3R)-(9CI) (CA INDEX NAME)

Absolute stereochemistry

L7 ANSWER 4 OF 139 CAPLUS COPYRIGHT 2002 ACS ACCESSION NUMBER: 2001:886126 CAPLUS DOCUMENT NUMBER: 136:6298 TITLE: Preparation of Novel tr Preparation of Novel triazolo pyrimidine

compounds as

pharmaceuticals
Larsson, Ulfr Magnusson, Mattias; Musil, Tibor;
Palmgren, Andreas
Astrazeneca AB, Swed.
PCT Int. Appl., 29 pp.
CODEM: PIXXD2 INVENTOR(S):

PATENT ASSIGNEE(5): SOURCE:

DOCUMENT TYPE: LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION: Patent English

	PATENT NO. K				KI	IND DATE				APPLICATION NO.					DATE		
	WO	WO 2001092263			A	1	20011206			WO 2001-SE1241				1	20010531		
		W:	AE,	AG,	AL,										BZ,		CH,
Ν,																	
			co,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	ES,	FI,	GB,	GD,	GΕ
			GM.	HR.	HU.	ID.	IL.	IN.	ıs.	JP.	KE.	KG.	KP.	KR.	KZ,	LC.	LK
,			•					,	,			,	,	,	,	,	
			LS,	LŤ,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	ΜZ,	NO,	NZ,	PL
•			DΟ	DII	en	e v	66	er	ev	e T		mu	70		TŻ,	***	***
			RO,	ĸo,	зь,	JE,	30,	31,	ъĸ,	эь,	10,	ın,	ıĸ,	11,	14,	UA,	UG
•			υz,	VN,	YU,	ZA,	ZW,	AM,	AZ,	BY,	KG,	ΚZ,	MD,	RU,	TJ,	TM	
		RW:	GH,	GM,	KΕ,	LS,	MW,	ΜZ,	SD,	SL,	SZ,	TZ,	UG,	ZW,	AT,	BE,	CH
•			DE	שת	De.		WD.	CP	CD	7.0	7.00				7.00	470	
			DE,	DK,	EJ,	£1,	rn,	GD,	GA,	IE,	11,	1.0,	mc,	ML,	PT,	SE,	IK,
•			ВJ,	CF,	CG,	CI,	CM,	GA,	GN,	G₩,	ML,	MR,	NE,	SN,	TD,	TG	
RIORITY APPLN. INFO.:					GB 2000-13488												
OTHER SOURCE(S):						SE 2000-2102								A 20000606			

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

The present invention relates to the prepn. of pyrimidine compds.,

useful as pharmaceutical intermediates, to a process for prepg. the pyrimidine compds., to intermediates used in the process, and to the

of said pyrimidine compds in the prepn. of pharmaceuticals, e.g. II. Thus, II was prepd. from the coupling of 4,6-dichloro-2-(propylsulfamyl)-5-pyrimidinamine and 2-2-([(3aR,45,6R,6aS)-6-amino-2,2-dimethyltetrahydro-3aH-cyclopenta[d][1,3]-dioxol-4-yl]oxy)-1-ethanol L-tartaric acid salt, hydrogenation of the resulting carbocyclic nucleoside I using a heavy

ANSWER 4 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued) metal catalyst, coupling with trans-2-(3,4-difluorophenyl) cyclopropanaminium (2R)-2-hydroxy-2-phenylethanoate, L7

and

deprotection.
220352-36-3P 376608-68-3P
RL: IMF (Industrial manufacture); RCT (Reactant); SPN (Synthetic preparation); PREF (Preparation); RACT (Reactant or reagent) (prepn. of novel triazolo pyrimidine compds. as pharmaceuticals) 220352-36-3 CAPLUS
Cyclopropanecarboxylic acid, 2-(3,4-difluorophenyl)-, (1R,2R)- (9CI)

RN CN (CA

Absolute stereochemistry.

RN 376608-68-3 CAPLUS
CN Cyclopropanecarboxylic acid, 2-(3,4-difluorophenyl)-,
(1R,2S,5R)-5-methyl2-(1-methylchyl)cyclohexyl ester, (1R,2R)- (9CI) (CA INDEX NAME)

IT 376608-69-4P
RI: IMF (Industrial manufacture); SPN (Synthetic preparation); PREP (Preparation)
(prepn. of novel triazolo pyrimidine compds. as pharmaceuticals)
RN 376608-69-4 CAPLUS
CN Cyclopropaneoarboxylic acid, 2-(3,4-difluorophenyl)-,
(1R, 2S, 5R)-5-methyl2-(1-methylethyl)cyclohexyl ester, (1S, 2S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L7 ANSWER 5 OF 139 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 2001:423016 CAPLUS
DOCUMENT NUMBER: 136:216891
HODGITHE OXIDATION OF (+)-3-carene by potassium permanganate permanganate Tolstikov, G. A.; Galin, F. Z.; Ignatyuk, V. K.; Kashina, Yu. A.; Zelenova, L. M.
CORPORATE SOURCE: Inst. Organic Chem., Russian Acad. Sci., Ufa,

Russia SOURCE: 338-340 Khimiya Prirodnykh Soedinenii (1992), (3,4),

CODEN: KPSUAR, ISSN: 0023-1150 Izdatel'stvo Fan Journal English CASREACT 136:216891

PUBLISHER: DOCUMENT TYPE: LANGUAGE:

OTHER SOURCE(S):

AB The exidn. of (+)-3-carene under the conditions of phase-transfer catalysis has been studied. It has been shown that when the reaction is performed in acetic acid the keto acids I and II and (-)-3.alpha.-hydroxycaran-4-one are formed.

1 14087-75-39 7023-33-55

RL: SPN (Synthetic preparation); FREP (Preparation) (exidn. of (+)-3-carene by potassium permanganate under phase-transfer

nse-transfer catalysis conditions)
14087-75-3 CAPLUS
Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2-oxopropyl)-, methyl

(1R,35) - (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

70223-33-5 CAPLUS

L7 ANSWER 4 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

REFERENCE COUNT: THIS

FORMAT

THERE ARE 4 CITED REFERENCES AVAILABLE FOR

RECORD. ALL CITATIONS AVAILABLE IN THE RE

ANSWER 5 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued) Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2-oxopropyl)-, (1R,3s)-

(CA INDEX NAME) Absolute stereochemistry. Rotation (-).

L7 CN (9CI)

```
L7 ANSWER 6 OF 139 CAPLUS COPYRIGHT 2002 ACS ACCESSION NUMBER: 2001:222368 CAPLUS DOCUMENT NUMBER: 135:61078 SYNTHANDER: 5VNTHANDER: 5VNTH
   TITLE: synthesis of (1S)-1-amino-2,2-dimethylcyclopropane-1-carboxylic acid via PLE mediated hydrolysis of bis(2,2,2-trifluoroethyl)
   2,2-dimethylcyclopropane-1,1-
                                                                                                                               dicarboxylate
Salgado, A.; Huybrechts, T.; Eeckhaut, A.; Van
  AUTHOR(S):
                                                                                                                                 Eycken, J.; Szakonyi, Z.; Fulop, F.; Tkachev,
  A.; De
A., De

Kimpe, N.

CORPORATE SOURCE: Faculty of Agricultural and Applied Biological Sciences, Department of Organic Chemistry, Ghent University, Ghent, B-9000, Belg.

SOURCE: Tetrahedron (2001), 57(14), 2781-2786

CODEN: TETRAB, ISSN: 0040-4020

PUBLISHER: Elsevier Science Ltd.

DOUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(5): CASREACT 135:61078

AB A stereoselective synthesis of (15)-1-amino-2, 2-dimethylcyclopropane-1-carboxylic acid is described. For example, hydrolysis of bis (2, 2, 2-trifluoroethyl) 2, 2-dimethylcyclopropane-1, 1-dicarboxylate with
 pig liver esterase (PLE) afforded (1R)-2,2-dimethyl-1-(2,2,2-trifluoroethoxycarbonyl)-cyclopropane-1-carboxylic acid in high enantiomeric excess. This compd. was rearranged to 2,2,2-trifluoroethyl
  (18)-2,2-dimethyl-1-[(N-ethoxycarbonyl)amino]-cyclopropane-1-carboxylat
via a Curtius type reaction with DPPA. Final alk. hydrolysis gave
(18)-1-amino-2,2-dimethylcyclopropane-1-carboxylic acid.
IT 345978-25-69
                            Jany/a-23-by
RL: BPN (Biosynthetic preparation); RCT (Reactant); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent)
(enantioselective prepn. of (amino)dimethylcyclopropanecarboxylic
   acid
                                        with esterase-mediated ester hydrolysis and Curtius rearrangement
  as
                       key steps)
345978-25-8 CAPLUS
1,1-Cyclopropanedicarboxylic acid, 2,2-dimethyl-, mono(2,2,2-trifluoroethyl) ester, (1R)- (9CI) (CA INDEX NAME)
 Absolute stereochemistry. Rotation (+).
                       ANSWER 6 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued) 1,1-Cyclopropanedicarboxylic acid, 2,2-dimethyl-, bis(2,2,2-trichloroethyl) ester (9CI) (CA INDEX NAME)
```

0-CH2-CC13

345978-23-6 CAPLUS CN 1,1-Cyclopropanedicarboxylic acid, 2,2-dimethyl-, bis(2,2-dichlorobutyl) ester (9CI) (CA INDEX NAME)

RN 345978-24-7 CAPJUS
CN 1,1-Cyclopropanedicarboxylic acid, 2,2-dimethyl-,
bis(2,2-dichlorohexyl)
ester (SCI) (CA INDEX NAME) 345978-24-7 CAPLUS

REFERENCE COUNT: FOR THIS THERE ARE 43 CITED REFERENCES AVAILABLE

RECORD. ALL CITATIONS AVAILABLE IN THE RE

ANSWER 6 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued) 10147-54-3P 18795-95-4P 345978-21-4P (Preparation), PREP (Preparation), L7 IT RACT (Reactant or reagent) (enantioselective prepn. of (amino)dimethylcyclopropanecarboxylic acid with esterase-mediated ester hydrolysis and Curtius rearrangement key steps)
10147-54-3 CAPLUS
1,1-Cyclopropanedicarboxylic acid, 2,2-dimethyl- (7CI, 9CI) (CA INDEX NAME) as CO2H CO2H

1,1-0yelpropaned (8CI, 9CI) (CA INDEX NAME) 18795-95-4 CAPLUS

345978-21-4 CAPLUS 1,1-Cyclopropanedicarboxylic acid, 2,2-dimethyl-, bis(2,2,2-trifluoroethyl) ester (9CI) (CA INDEX NAME)

345978-22-5P 345978-23-6P 345978-24-7P
RL: SPN (Synthetic preparation); PREP (Preparation)
(enanticselective prepn. of (amino)dimethylcyclopropanecarboxylic with esterase-mediated ester hydrolysis and Curtius rearrangement key steps) 345978-22-5 CAPLUS RN

L7 ANSWER 7 OF 139 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 2000:893122 CAPLUS
DOCUMENT NUMBER: 134:233023
TITLE: relationship of Synthesis and stereostructure-activity three asymmetric center pyrethroids: 2-methyl-3-phenylcyclopropyl-methyl 3-phenoxybenzyl

ether and cyanohydrin ester Nishii, Y.; Maruyama, N.; Wakasugi, K.; Tanabe, Y. The Physical Chemical Research Institute (RIKEN), Wako, Saitama, 351-0198, Japan Bioorganic & Medicinal Chemistry (2001), 9(1), AUTHOR(S): CORPORATE SOURCE:

33-39

CODEN: EMECEP, ISSN: 0968-0896

PUBLISHER: Elsevier Science Ltd.

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOUNCE(S): CASREACT 134:233023

AB 2-Methyl-3-phenylcyclopropylmethyl 3-phenoxybenzyl ether 2 and cyanohydrin

ester 3, a couple of pyrethroids with three asym. centers, were synthesized. Of each of the four diastereomers of 2 and 3, only the (IR*, 2R*, 3R*)-2a and 3a showed significant insecticidal activities.

Dual

Dual sets of enantiomers [(1R, 2R, 3R) -(-) -2a and (1S, 2S, 3S) -(+) -2a] and [(1R, 2R, 3R) -(-) -3a and (1S, 2S, 3S) -(+) -3a] were synthesized through the asym. cyclopropanation using the Aratani catalyst. Significant sepns of insecticidal activities were obsd. between both the enantiomers against the tobacco cutworm (Spodoptera litura) and the common mosquito

(Culex pipiens pallens); (1s,2s,3s)-(+)-2a and (+)-3a showed higher activities than their antipodes (1R,2R,3R)-(-)-2a and (-)-3a. This result

to the second example of such synthetic pyrethroids with three asym. centers.
27189-94-2P 27189-95-3P 121422-15-9P 121422-16-0P 135969-86-7P 135965-87-8P 139655-50-0P 153665-51-1P 330672-10-1P 330672-17-3P 330672-

(Reactant or reagent) (intermediate in synthesis of asym. center pyrethroids) 27189-94-2 CAPLUS Cyclopropanecerboxylic acid, 2-methyl-3-phenyl-, (1R,2s,3s)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

27189-95-3 CAPLUS Cyclopropanecarboxylic acid, 2-methyl-3-phenyl-, (1R,2R,3R)-rel-(CA INDEX NAME)

Relative stereochemistry.

121422-15-9 CAPLUS Cyclopropanecarboxylic acid, 2-methyl-3-phenyl-, ethyl ester, (1R,2R,3R)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

121422-16-0 CAPLUS Cyclopropanecarboxylic acid, 2-methyl-3-phenyl-, ethyl ester, (1R,2S,3S)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

135969-86-7 CAPLUS Cyclopropanecarboxylic acid, 2-methyl-3-phenyl-, ethyl ester,

L7 ANSWER 7 OF 139 CAPLUS COPYRIGHT 2002 ACS

330672-10-1 CAPLUS Cyclopropanecarboxylic acid, 2-methyl-3-phenyl-, (1R,2S,3R)-rel-(9CI) (CA INDEX NAME)

Relative stereochemistry.

330672-11-2 CAPLUS Cyclopropanecarboxylic acid, 2-methyl-3-phenyl-, (1R,2R,3S)-rel-(9CI) (CA INDEX NAME)

Relative stereochemistry.

330672-12-3 CAPLUS Cyclopropanecarboxylic acid, 2-methyl-3-phenyl-, (1R,2R,3R)- (9CI) RN CN (CA

Absolute stereochemistry. Rotation (-).

RN 330672-13-4 CAPLUS

ANSWER 7 OF 139 CAPLUS COPYRIGHT 2002 ACS (1R, 2R, 3S)-rel- (9CI) (CA INDEX NAME) (Continued)

Relative stereochemistry.

135969-87-8 CAPLUS Cyclopropanecarboxylic acid, 2-methyl-3-phenyl-, ethyl ester, (1R,2S,3R)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

RN 153665-50-0 CAPLUS CN Cyclopropanecarboxylic acid, 2-methyl-3-phenyl-, ethyl ester, (18.25.35) (201) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

RN 153665-51-1 CAPLUS CN Cyclopropanecarboxylic acid, 2-methyl-3-phenyl-, ethyl ester, (1S, 2R, 3R) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

ANSWER 7 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued) Cyclopropanecarboxylic acid, 2-methyl-3-phenyl-, (15,25,35)- (9CI)

Absolute stereochemistry. Rotation (+).



IT 330653-25-3P 330653-26-4P 330653-27-5P 330653-28-6P 330653-34-4P 330653-35-5P RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PRP (Properties); SPN (Synthetic preparation); RIOL

BIOL

(Biological study), PREP (Preparation)
(synthesis of asym. center pyrethroids)
330653-25-3 CAPLUS
(Cyclopropanecarboxylic acid, 2-methyl-3-phenyl-, cyano(3-phenoxyphenyl)methyl ester, (1R, 2R, 3R)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

330653-26-4 CAPLUS

Cyclopropanecarboxylic acid, 2-methyl-3-phenyl-, cyano(3-phenoxyphenyl)methyl ester, (1R,2S,3S)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

330653-27-5 CAPLUS
Cyclopropanecarboxylic acid, 2-methyl-3-phenyl-, cyano(3-phenoxyphenyl)methyl ester, (1R,2S,3R)-rel- (9CI) (CA INDEX NAME)

L7 ANSWER 7 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued) Relative stereochemistry.

330653-28-6 CAPLUS Cyclopropanecarboxylic acid, 2-methyl-3-phenyl-, cyano(3-phenoxyphenyl)methyl ester, (1R,2R,3S)-rel- (9C1) (CA INDEX NAME)

Relative stereochemistry.

330653-34-4 CAPLUS

Cyclopropanecarboxylic acid, 2-methyl-3-phenyl-, cyano(3-phenoxyphenyl)methyl ester, (1R, 2R, 3R) - (9CI) (CA INDEX NAME)

Absolute stereochemistry.

330653-35-5 CAPLUS

Cyclopropanecarboxylic acid, 2-methyl-3-phenyl-, cyano(3-phenoxyphenyl)methyl ester, (15,25,35)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L7 ANSWER 8 OF 139 CAPLUS COPYRIGHT 2002 ACS ACCESSION NUMBER: 2000:739250 CAPLUS DOCUMENT NUMBER: 134:237222

TITLE:

TITLE: AUTHOR(S):

134:237222 Synthesis of cyclopropylamine Yi, Jianming, Tang, Kuowen, Huang, Liang Department of Chemical Engineering, Yueyang CORPORATE SOURCE: Normal

University, Yueyang, 414000, Peop. Rep. China Jingxi Huagong (2000), 17(9), 552-555, 557 CODEN: JIHUFJ, ISSN: 1003-5214 Jingxi Huagong Bianjibu Journal SOURCE:

PUBLISHER:

DOCUMENT TYPE: LANGUAGE: OTHER SOURCE(S):

DOCUMENT TYPE: Journal LANGUAGE: Chinese OTHER SOURCE(s): CASREAGT 134:237222

AB Cyclopropylamine was synthesized from .gamma.-butyrolactone and isopropanol by five step reactions. The five step reactions comprise ring-opening esterification of .gamma.-butyrolactone with isopropanol and thionyl chloride to form iso-Pr .gamma.-chlorobutyrate (I);

cyclizing I

cyclizing I
using solid-liq. phase transfer catalysis (PTC) to from iso-Pr
cyclopropanecarboxylate (II), hydrolyzing II in the presence of
liq./liq.
PTC and neutralizing to give cyclopropanecarboxylic acid (III); then
acylating III with urea to form cyclopropanecarboxamide (IV) and
Hofmann

degrdn of IV to give cyclopropylamine. Phase transfer catalysis was used

in the two key steps of cyclization and hydrolysis, and effects of

types and amt. of PTC, reaction temp. and molar ratio of reactants on the yield

were discussed. Results of expts. show that the new synthesis method is superior to the those from the literature and is feasible for prodn.

simple processes, mild reaction conditions and cheap materials. The total

total
yield of cyclopropylamine was summed up to 52.6%.
IT 1759-53-1P, Cyclopropanecarboxylic acid 6887-83-8P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation);

(Reactant or reagent)
(cyclopropylamine prepn. with phase transfer catalysis)
1759-53-1 CAPLUS
Cyclopropanecarboxylic acid (6CI, 7CI, 8CI, 9CI) (CA INDEX NAME)

CO2H

6887-83-8 CAPLUS Cyclopropanecarboxylic acid, 1-methylethyl ester (9CI) (CA INDEX

L7 ANSWER 7 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)
REFERENCE COUNT: 23 THERE ARE 23 CITED REFERENCES AVAILABLE FOR RECORD. ALL CITATIONS AVAILABLE IN THE RE

L7 ANSWER 8 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

C-OPr-i

ACCESSION NUMBER: DOCUMENT NUMBER: TITLE: 134:4521

Ruthenium-catalysed addition of carboxylic acids onto

1-ethcxy-2-ethynylcyclopropane to yield functional

allenes with skeletal rearrangement Emme, Ingo: Bruneau, Christian: De Meijere, AUTHOR (S):

Dixneuf, Pierre H. Laboratoire de Chimie de Coordination et CORPORATE SOURCE: Catalyse, UMR 6509: CNRS - Universite de Rennes, Rennes, F-35042,

Synlett (2000), (9), 1315-1317 CODEN: SYNLES; ISSN: 0936-5214 Georg Thieme Verlag Journal

PUBLISHER: DOCUMENT TYPE: LANGUAGE: OTHER SOURCE(S): AB The selection

NAME: FOR A SOURCE (S): CASREACT 134:4521
The selective one-seep transformation of trans-1-ethoxy-2-ethynylcyclopropane by a formal 1,4-addh. of carboxylic acids with cyclopropal-ring opening into allene derives, (53-964 yield) is

cyclopropyl-ring opening into allene derivs. (53-90% year), 13
achieved
with the binuclear ruthenium precatalyst [Ru(O2CH)(CO)2(PPh3)]2. The
products combine a reactive allene moiety and a protected aldehyde
functionality, and thus offer themselves as versatile building
blocks for
cro. synthesis.

IT 308143-30-8P
RL: SPN (Synthetic preparation), PREP (Preparation)
(prepn. of)
RN 308143-30-8 CAPLUS
CN Cyclopropanecarboxylic acid, 1-ethoxy-3,4-pentadienyl ester (9CI)
(CA

INDEX NAME)

1759-53-1, Cyclopropanecarboxylic acid RL: RCT (Reactant), RACT (Reactant or reagent) (ruthenium-catalyzed addm. of carboxylic acids onto ethynylcyclopropane) 1759-53-1 CAFLUS

Cyclopropanecarboxylic acid (6CI, 7CI, 8CI, 9CI) (CA INDEX NAME)

L7 ANSWER 10 OF 139 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 2000:690434 CAPLUS
DOCUMENT NUMBER: 134:17149
TITLE: ASymmetric cyclopropanation of vinyl fluorides:
access

to enantiopure monofluorinated cyclopropane carboxylates Meyer, Oliver G. J., Frohlich, Roland, Haufe, AUTHOR (S):

Gunter CORPORATE SOURCE:

Organisch-Chemisches Institut, Westfalische Wilhelms-Universitat Munster, Munster, D-48149, Germany Synthesis (2000), (10), 1479-1490 CODEN: SYNTEF, ISSN: 0039-7881 Georg Thieme Verlag Journal

SOURCE: PUBLI SHER

DOCUMENT TYPE: LANGUAGE:

DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASERACT 134:17149

AB The transition metal catalyzed cyclopropanation with alkyl
diazoacetates
of sliph. or arom. vinyl fluorides, prepd. from the corresponding

by bromofluorination and subsequent dehydrobromination, provides a

smooth
access to racemic 1:1 mixts, of cis/trans isomeric monofluorinated
cyclopropanecarboxylates. The application of enantiopure
bis(oxacoline)
ligands and Cu(I) triflate makes the reaction
trans-disstereoselective and
enantioselective. For example, treatment of .alpha.-fluorostyrene
with

with

with

tert-Bu diazoacetate in the presence of 2 molt of the catalyst
prepd. from (5)-tert-leucine-based 2,2-bis(4-tert-butyl-2-oxazolin-2yl)propane and CuOTf gave a 4:1 mixt. of trans-2-fluoro-2phenylcyclopropanecarboxylate (4e) with 931 ee and the corresponding
cls-isomer 5e with 894 ee. The abs. configuration of the

trans-isomer 4e

is (15,25) by X-ray structure anal. of a deriv.

If 309242-41-9P 309242-42-PP 309242-43-IP
309242-41-9P 309242-43-IP
BL: SNN (Synthetic preparation), PDPP (Preparation)

309242-44-2P
RL: SPN (Synthetic preparation): PREP (Preparation)
(asym. cyclopropanation of vinyl fluorides by alkyl diazoacetates catalyzed by copper triflate and oxazoline derivs.)
309242-41-9 CAPLUS
Cyclopropanecarboxylic acid, 2-fluoro-2-phenyl-, 1,1-dimethylethyl

ester, (1R, 2R) -rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

L7 ANSWER 9 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

со2н

REFERENCE COUNT: 34 THERE ARE 34 CITED REFERENCES AVAILABLE FOR

RECORD. ALL CITATIONS AVAILABLE IN THE RE

FORMAT

Absolute stereochemistry.

309242-43-1 CAPLUS Cyclopropanecarboxylic acid, 2-fluoro-2-phenyl-, 1,1-dimethylethyl

ester, (1R,2S)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

309242-44-2 CAPLUS Cyclopropanecarboxylic acid, 2-fluoro-2-phenyl-, 25,58)-5-methyl-2-(1-methylethyl)cyclohexyl ester, (1R,2R)- (9CI) (CA INDEX NAME)

309242-52-2P 309242-53-3P 309242-54-4P 309242-55-5P 309242-56-6P 309242-57-7P 309242-58-8P

RL: SPN (Synthetic preparation); PREP (Preparation) (copper-catalyzed asym. cyclopropanation of vinyl fluorides by

diazoacetates giving)
309242-52-2 CAPLUS
Cyclopropanecarboxylic acid, 2-(4-chlorophenyl)-2-fluoro-, ethyl

ANSWER 10 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued) (15,25) - (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

RN 309242-b3-, Cyclopropanecarboxylic accepter, (1s,2s,3R)- (9CI) (CA INDEX NAME) 309242-53-3 CAPLUS Cyclopropanecarboxylic acid, 2-fluoro-3-methyl-2-phenyl-, ethyl

Absolute stereochemistry. Rotation (-).

309242-54-4 CAPLUS Cyclopropanecarboxylic acid, 2-butyl-2-fluoro-, ethyl ester, (1s,2s)-(9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

309242-55-5 CAPLUS Cyclopropanecarboxylic acid, 2-(4-chlorophenyl)-2-fluoro-, ethyl (1R, 2S) - (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

L7 ANSWER 10 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

īТ 309242-46-4P SUSZAZ-40-5W
RE: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation) (prepn. and crystal structure of) 309242-46-4 CAPLUS Cyclopropanecarboxylic acid, 2-fluoro-2-phenyl-, (1R,25)-rel- (9CI)

INDEX NAME)

Relative stereochemistry.

II 309242-33-9P
RL: RCT (Reactant): SPN (Synthetic preparation): FREP (Preparation):

RACT

(Reactant or reagent)
(prepn. and lipase-catalyzed stereoselective hydrolysis of)
RN 309242-33-9 CAFLUS
CN Cyclopropanecarboxylic acid, 2-fluoro-2-phenyl-, ethyl ester,
(1R, 2R) = rel(9C1) (CA INDEX NAME)

Relative stereochemistry

309242-34-0P 309242-35-1P 309242-36-2P 309242-38-4P 309242-39-5P 309242-40-6P 309242-47-5P 309242-48-6F 309242-51-1P RL: SFN (Synthetic preparation); PREP (Preparation) (prepn. of) 309242-34-0 CAPLUS Cycloprepanecarboxylic acid, 2-(4-chlorophenyl)-2-fluoro-, ethyl RN 309242-3-1 CN Cyclopropanecarboxylic successful (1R,2R)-rel- (9CI) (CA INDEX NAME)

ANSWER 10 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued) 309242-56-6 CAPLUS 303242-30-6 CAPLUS Cyclopropanecarboxylic acid, 2-fluoro-3-methyl-2-phenyl-, ethyl ester, (1R, 25, 3R) - (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

309242-57-7 CAPLUS Cyclopropanecarboxylic acid, 2-butyl-2-fluoro-, ethyl ester, (15,2R)-(9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

RN 309242-58-8 CAPLUS CN Cyclopropanecarboxylic acid, 2-fluoro-2-phenyl-, 1,1-dimethylethylester, (1R,2R)-rel-(+)- (9CI) (CA INDEX NAME)

Rotation (+). Absolute stereochemistry unknown.

IT 309242-37-3P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation);

RACT

(Reactant or reagent)
(prepn. and attempted hydrolysis in presence of lipases)
RN 309242-37-3 CAPLUS
CN Cyclopropanecarboxylic acid, 2-fluoro-2-phenyl-, ethyl ester,
(SR.ZS)-rel(SCI NDEX NAME)

Relative stereochemistry.

L7 ANSWER 10 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

309242-35-1 CAPLUS Cyclopropanecarboxylic acid, 2-fluoro-3-methyl-2-phenyl-, ethyl ester, (1R,2R,3S)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

RN 309242-36-2 CAPLUS CN cyclopropanecarboxylic acid, 2-butyl-2-fluoro-, ethyl ester, (1R, 2R),-cl; (9CI) (CA INDEX NAME)

Relative stereochemistry.

RN 309242-38-4 CAPLUS
CN Cyclopropanecarboxylic acid, 2-(4-chlorophenyl)-2-fluoro-, ethyl (1R, 2S)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

309242-39-5 CAPLUS Cyclopropanecarboxylic acid, 2-fluoro-3-methyl-2-phenyl-, ethyl ester,

ANSWER 10 OF 139 CAPLUS COPYRIGHT 2002 ACS (1R,2S,3R)-rel- (9CI) (CA INDEX NAME) (Continued)

Relative stereochemistry.

RN 309242-40-8 CAPLUS CN Cyclopropanecarboxylic acid, 2-butyl-2-fluoro-, ethyl ester, (1R, ZS)-rel-(9CI) (CA INDEX NAME)

Relative stereochemistry.

309242-47-5 CAPLUS Cyclopropanecarboxylic acid, 2-fluoro-3-phenyl-, ethyl ester, (1R, ZR, 3R) -rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

309242-48-6 CAPLUS Cyclopropanecarboxylic acid, 2-fluoro-3-(4-methoxyphenyl)-, ethyl (1R, 2R, 3R) -rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

L7 ANSWER 10 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

309242-50-0 CAPLUS Cyclopropanecarboxylic acid, 2-fluoro-2-phenyl-, ethyl ester, (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

FORMAT

REFERENCE COUNT: FOR THIS 81

THERE ARE 81 CITED REFERENCES AVAILABLE RECORD. ALL CITATIONS AVAILABLE IN THE RE

309242-51-1 CAPLUS

.OEt

INDEX NAME) Relative stereochemistry.

Ph. R CO2H

NAME) Absolute stereochemistry.

Absolute stereochemistry. Rotation (-).

L7 ANSWER 11 OF 139 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 2000:675087 CAPLUS
DOCUMENT NUMBER: 134:17278
TITLE: Practical and Highly Enantioselective Ring
Opening of CAPLUS Agraphydrida Mediated by Chaples

(Reactant or reagent)
(stereoselective synthesis and conversion to amide)
309242-49-7 CAPLUS

Cyclic Meso-Anhydrides Mediated by Cinchona

ANSWER 10 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

Cyclopropanecarboxylic acid, 2-fluoro-2-phenyl-, ethyl ester, (1R,2S)-(9CI) (CA INDEX NAME)

309242-45-3P RL: PRP (Properties); RCT (Reactant); SPN (Synthetic preparation);

309242-49-7P, (1R,2R)-2-Fluoro-2-phenylcyclopropanecarboxylic acid 309242-50-0P, (1S,2S)-Ethyl 2-fluoro-2-phenylcyclopropanecarboxylate RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation);

Cyclopropanecarboxylic acid, 2-fluoro-2-phenyl-, (1R,2R)- (9CI) (CA

PREF
(Preparation); RACT (Reactant or reagent)
(prepn., crystal structure, and N-Boc-protected
fluorocyclopropylamine)
RN 309242-45-3 CAPLUS
CN Cyclopropanecarboxylic acid, 2-fluoro-2-phenyl-, (1R,2R)-rel- (9CI)

Alkaloids AUTHOR(S): L.; Bolm, Carsten; Schiffers, Ingo; Dinter, Christian

Gerlach, Arne Institut fuer Organische Chemie der RWTH Aachen, Aachen, D-52056, Germany Journal of Organic Chemistry (2000), 65 (21), CORPORATE SOURCE:

SOURCE: 6984-6991

5984-6991

CODEN: JOCEAH; ISSN: 0022-3263

PUBLISHER: American Chemical Society

Journal
LANGUAGE: English

OTHER SOURCE(S): CASPRACT 134:17278

AB The cinchona alkaloid-mediated opening of prochiral cyclic anhydrides in

the presence of methanol leading to optically active hemiesters is described. Very structurally diverse anhydrides are converted into their

corresponding Me monoesters, and either enantiomer can be obtained orresponding as money to the up to 99% ee by using quinine or quinidine as directing additive. After

reaction, the alkaloids can be recovered almost quant. and reused wi thou loss of enantioselectivity. Addnl., a catalytic protocol which

its
the substoichiometric use of quinidine in the presence of easily
accessible pentamethylpiperidine (pempidine) is presented.
81873-49-6P 81873-51-0P 88335-86-8P
88335-87-9P

88335-87-9P
RL: SPN (Synthetic preparation), PREF (Preparation)
(stereoselective methanolysis of cyclic meso-anhydrides mediated by
quinine or quinidine)
81873-49-6 CAPUIS
1,2-Cyclopropanedicarboxylic acid, 3,3-dimethyl-, monomethyl ester,
(1R,2S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

81873-51-0 CAPLUS 1,2-Cyclopropanedicarboxylic acid, 3,3-dimethyl-, monomethyl ester, (15,2R)- (9CI) (CA INDEX NAME) L7 ANSWER 11 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued) Absolute stereochemistry. Rotation (-).

88335-86-8 CAPLUS
1,2-Cyclopropanedicarboxylic acid, monomethyl ester, (15,2R)- (9CI)

Absolute stereochemistry. Rotation (+).

88335-87-9 CAPLUS
1,2-Cyclopropanedicarboxylic acid, monomethyl ester, (1R,2S)- (9CI) INDEX NAME!

Absolute stereochemistry. Rotation (-).

REFERENCE COUNT:

97 THERE ARE 97 CITED REFERENCES AVAILABLE

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 12 OF 139 CAPLUS COPYRIGHT 2002 ACS

IT 307964-74-5P 307964-75-6P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT

(Reactant or reagent) (rhodium(II)-catalyzed cyclization of amido diazo carbonyl

(rhodium(II)-catalyzed cyclization of compds.)

RN 307964-74-5 CAPLUS

CN cyclopropanecarboxylic acid,

1-{([1,1-dimethylethyl) (phenylmethyl) amino]ca
rbonyl]- (9CI) (CA INDEX NAME)

307964-75-6 CAPLUS CN Cyclopropanearboxylic acid, 1-[(1,1-dimethylethyl) (phenylmethyl) amino]ca rbonyl]-, ethyl ester (9CI) (CA INDEX NAME)

REFERENCE COUNT: FOR THIS

THERE ARE 90 CITED REFERENCES AVAILABLE

RECORD. ALL CITATIONS AVAILABLE IN THE RE

FORMAT

L7 ANSWER 12 OF 139 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 2000:663032 CAPLUS
DOCUMENT NUMBER: 133:362462
TITLE: Rhodium(II)-Catalyzed Cyclization of Amido Diazo
Carbonyl Compounds
AUTHOR(S): Padwa, Albert; Hasegawa, Tadashi; Liu, Bing;

AUTHOR(S): Zhang,

CORPORATE SOURCE: Department of Chemistry, Emory University,

GA, 30322, USA Journal of Organic Chemistry (2000), 65(21), SOURCE: 7124-7133

CODEN: JOCEAH; ISSN: 0022-3263 PUBLISHER:

American Chemical Society Journal PUBLISHER: DOCUMENT TYPE: LANGUAGE: OTHER SOURCE(S):

UNGE: English
R SOURCE(S): CASREACT 133:362462
A series of acyclic diazo keto amides were prepd. from
N-benzoyl-N-alkylaminopropanoic acids and were treated with a

catalytic ant. of rhodium(II) acetate. The resultant carbenoids underwent facile

racile cyclization onto the neighboring amide carbonyl oxygen atom to generate

generate
seven-membered carbonyl ylide dipoles. Subsequent collapse of the
dipoles
thickness dissipation produce bicyclic epoxides which undergo

further
reorganization to give substituted 5-hydroxydihydropyridones in good
yield. Depending on the nature of the substituent groups, it was
possible
to trap some of the initially formed carbonyl ylide dipoles with a
reactive dipolarophile such as DMAD. In other cases, cyclization of
the

dipole to the epoxide is much faster than bimol. trapping. A related cyclization/rearrangement sequence occurred when diazo keto amides derived

derived from the cyclic pyrrolidone and piperidone ring systems were subjected to catalytic quantities of Rh(II) acetate. With these systems, exclusive O-cyclization of the amido group onto the carbenoid center occurs to generate a seven-ring carbonyl ylide dipole. Starting materials are easily prepd., and the cascade sequence proceeds in good yield and does

not require special precautions. The overall procedure represents an efficient one-pot approach toward the synthesis of various indolizidine and quinolizidine ring systems.

113020-21-6
REL RCT (Reactant), RACT (Reactant or reagent)
(rhodium(II)-catalyzed cyclization of amido diazo carbonyl compds.)
113020-21-6 CAPLUS
1,1-Cyclopropanedicarboxylic acid, monomethyl ester (9CI) (CA INDEX

L7 ANSWER 13 OF 139 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 2000:556471 CAPLUS
DOCUMENT NUMBER: 133:281391
TITLE: Rhodium(II)-Catalyzed Equilibration of Push-Pull
Carbonyl and Ammonium Ylides. A Computationally

Understanding of the Reaction Pathway Padwa, Albert; Snyder, James P.; Curtis, Erin A.; Sheehan, Scott M.; Worsencroft, Kimberly J.; AUTHOR (S) :

Kappe, C.

Oliver Department of Chemistry, Emory University, CORPORATE SOURCE: Atlanta,

Atlanta,

GA, 30322, USA

SOURCE:

Journal of the American Chemical Society (2000),
122(34), 8155-8167

CODEN: JACSAT, ISSN: 0002-7863

FUBLISHER:
American Chemical Society
Journal
LANGUAGE:
English
AB alpha-Diazo esters contg. an amido group in the .gamma.-position
have

been found to undergo a rhodium(II)-catalyzed transformation,

ucing
five-membered ammonium or carbonyl ylides depending on the reaction
conditions used. In the absence of an external dipolarophile,

ylides are the exclusive products formed. In most cases these ylides cannot be isolated as they readily undergo sigmatropic rearrangement

fragmentation reactions. In the presence of typical dipolar philes

as DMAD or N-phenylmaleimide, cycloaddn. products derived from cyclic carbonyl ylide dipoles are formed as the major products. The rhodium carbenoid intermediate generated in these reactions can either attack

the lone pair of electrons on the amide nitrogen (ammonium ylide formation) or the lone pair of electrons on the carbonyl oxygen (carbonyl ylide formation). The exptl. observations reflect a catalyst-promoted system of equil. with a clear-cut thermodn. bias. To examine the underlying mechanism in detail, d. functional theory (DFT) calcns.

performed on all plausible intermediates, including the full dirhodium tetracarboxylate functionality. A semiquant. energy manifold is

tetracarboxylate functionality. A summitted developed that rationalizes the empirical observations and provides a detailed picture of the role of the dirhodium(II) catalyst.

IT 3697-66-3, 1,1-Cyclopropanedicarboxylic acid, monoethyl ester RL: PEP (Physical, engineering or chemical process); RCT (Reactant);

(Process); RACT (Reactant or reagent) (study on the reaction pathway of the rhodium(II)-catalyzed equilibration of push-pull carbonyl and ammonium ylides) 3697-66-3 CAPLUS

RN 3697-66-3 CAPLUS CN 1,1-Cyclopropanedicarboxylic acid, monoethyl ester (8CI, 9CI) (CA INDEX

IT

299204-32-3P 299204-33-4P 299204-36-7P 299204-37-8P 299204-41-4P 299204-42-5P RL: PEP (Physical, engineering or chemical process); RCT (Reactant);

SFN

(Synthetic preparation); PREP (Preparation); PROC (Process); RACT
(Reactant or reagent)
(study on the reaction pathway of the rhodium(II)-catalyzed
equilibration of push-pull carbonyl and ammonium ylides)
RN 299204-32-3 CAPLUS
CN Cyclopropanecarbonylic acid,
1-[[methyl(phenylmethyl)amino] carbonyl]-,
ethyl ester (9CI) (CA INDEX NAME)

299204-33-4 CAPLUS Cyclopropanecarboxylic acid, 1-[[methyl(phenylmethyl)smino]carbonyl]-(SCI) (CA INDEX NAME)

299204-36-7 CAPLUS Cyclopropanecarboxylic acid, 1-[(diethylamino)carbonyl]-, ethyl ester (9C1) (CA INDEX NAME)

L7 ANSWER 13 OF 139 CAPLUS COPYRIGHT 2002 ACS FORMAT

L7 ANSWER 13 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

RN 299204-37-8 CAPLUS CN Cyclopropanecarboxylic acid, 1-[(diethylamino)carbonyl]- (9CI) (CA INDEX NAME)

299204-41-4 CAPLUS Cyclopropanecarboxylic acid, 1-[{methylphenylamino}carbonyl]-, ethyl (9CI) (CA INDEX NAME)

299204-42-5 CAPLUS Cyclopropanecarboxylic acid, 1-[(methylphenylamino)carbonyl]- (9CI) INDEX NAME)

THERE ARE 108 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE REFERENCE COUNT: 108

L7 ANSWER 14 OF 139 CAPLUS COPYRIGHT 2002 ACS ACCESSION NUMBER: 1999: 770730 CAPLUS DOCUMENT NUMBER: 132:122316 Transition For Capture 1 Transitio

1999:770730 CAPLUS
132:122310 metal-catalyzed [5+2]-cycloadditions of
2-substituted-1-vinylcyclopropanes: Catalyst
control and reversal of regioselectivity
Wender, Paul A.: Dyckman, Alaric J.
Department of Chemistry, Stanford University,
Stanford, CA, 94305-5000, USA
Organic Letters (1999), 1(13), 2089-2092
CODEN: ORLEFT: ISSN: 1523-7060
American Chemical Society
Journal
English
CASREACT 132:122316 AUTHOR(S): CORPORATE SOURCE:

PUBLISHER: DOCUMENT TYPE: LANGUAGE: OTHER SOURCE(S): GI

AB Studies on the stereo- and regioselectivity of rhodium(I)-catalyzed [5+2]-cycloaddns. of 2-substituted-1-vinylcyclopropanes, e.g. I (R = CHZOM, CHZOAC, CHZOSAC, COZH, COZMe) were described. The relative stereochem. of vicinal cyclopropane substituents is conserved in these reactions, translating into distinct 1,4- or 1,5-stereorelationships in the cycloadducts. Exceptional regioselectivity in cyclopropane bond

bond cleavage and even reversal of cleavage selectivity can be obtained

cleavage and even terrors.

through
judicious selection of substituents and/or catalyst. Thus,
cycloaddn. of I (R = CO2Me) in toluene contg. Nh(PPh3)3(O2CCF3) at
110.degree. for one hour gave 81% of a 20:1 mixt. of
hexahydroazulenetricarboxylates II and III whereas cycloaddn. of I (R

CO2Me) in the presence of [Rh(CO)2Cl]2 gave 93% of a 1:11 mixt. of II and III.

ANSWER 14 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued) 256463-07-79 256463-08-89 256463-20-4P RE: RCT (Reactant); SPM (Synthetic preparation); PREP (Preparation);

RACT

(Reactant or reagent)
(prepn. of methylhexahydroazulenecarboxylates by rhodium
complex-catalyzed regioselective/stereoselective cycloaddns. of
[[methoxycarbonyl] octenynyl] (pyclopropanes)
256463-07-7 CAPLUS
Propanedioic acid, 2-butynyl[(2E)-3-[(1R,2S)-2-carboxycyclopropyl]-2propenyl]-, 1,3-dimethyl ester, rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.
Double bond geometry as shown.

256463-08-8 CAPLUS
Propanedioic acid, 2-butynyl[(2E)-3-[(1R,25)-2(methoxycarbonyl)cyclopropyl]-2-propenyl]-, dimethyl ester, rel-

Relative stereochemistry. Double bond geometry as shown.

256463-20-4 CAPLUS
Propanedioic acid, 2-butynyl[(2E)-3-[(1R,2R)-2-(methoxycarbonyl)cyclopropyl]-2-propenyl]-, dimethyl ester, rel-(9CI)

(CA INDEX NAME)

Relative stereochemistry.
Double bond geometry as shown.

L7 ANSWER 15 OF 139
ACCESSION NUMBER:
DOCUMENT NUMBER:
1399:722744 CAPLUS
131:310403
Preparation of trans-3-(1-propynyl)-2,2-dimethylcyclopropanecarboxylate compounds
Mori. Tatauyar Hatauo, Noritada
Sumitomo Chemical Company, Limited, Japan
Eur. Pat. Appl., 9 pp.
COIDEN TYPE:
LANGUAGE:
FAMILY ACC. NUM. COUNT:

FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

APPLICATION NO. DATE PATENT NO. KIND DATE 287 Al 19991110 EP 1999-303549 19990506 AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, EP 955287 PT. IE, SI, LT, LV, FI, RO
074 A 20000606
152 A 19991117
026368 A2 20000125 US 1999-304838 CN 1999-107522 JP 1999-125740 US 6072074 CN 1235152 JP 2000026368 JP 2000026368
PRIORITY APPLN. INFO.:
OTHER SOURCE(S):
GI JP 1998-126025 CASREACT 131:310403; MARPAT 131:310403

AB Trans-3-(1-propynyl)-2,2-dimethylcyclopropanecarboxylate compds. (I; R =

H, C1-4 alkyl) (e.g., R = Et), which are useful agrochem.

intermediates, are readily prepd. in high yield and selectivity by the intramol. cyclocondensation of RO2CCH2C(CH3)2CHCICH2CC12CH3 with base (e.g.,

cyclocondensation of interest of the control of the control of the control of the corresponding trans-3-(2)-(1-propenyl)-2,2-dimethylcyclopropanecarboxylate compds. (II e.g., R = Et).

IT 247920-98-59 247920-99-69
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation);

L7 ANSWER 14 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

REFERENCE COUNT:

FORMAT

THERE ARE 14 CITED REFERENCES AVAILABLE FOR

RECORD. ALL CITATIONS AVAILABLE IN THE RE

ANSWER 15 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

(Reactant or reagent)
(Prepn. of trans-3-(1-propynyl)-2,2-dimethylcyclopropanecarboxylate
compda: and their derivs.)
247920-98-5 CaPLUS
(Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(1-propynyl)-, ethyl

(1R, 3R) -rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

247920-99-6 CAPLUS Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(1Z)-1-propenyl-, ethyl (1R, 3R) -rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.
Double bond geometry as shown

247921-00-2P

IT 247921-00-2P
Rl: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of trans-3-(1-propynyl)-2,2-dimethylcyclopropanecarboxylate compds. and their derivs.)
RN 247921-00-2 CAPLUS
CN cyclopropanecarboxylic acid, 2,2-dimethyl-3-(12)-1-propenyl-, (1R,3R)-rel-

(9CI) (CA INDEX NAME)

Relative stereochemistry.
Double bond geometry as shown.

REFERENCE COUNT:

2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR L7 ANSWER 15 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued) RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 16 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

RN CN (9CI) 946-39-4 CAPLUS Cyclopropanecarboxylic acid, 2-phenyl-, ethyl ester, (1R,2R)-rel-(CA INDEX NAME)

Relative stereochemistry.

RN 5682-61-1 CAPLUS CN Cyclopropanecarboxylic scid, 2-phenyl-, methyl ester, (1R,25)-rel-(9C1) (CA INDEX NAME)

Relative stereochemistry.

23020-15-7 CAPLUS Cyclopropanecarboxylic acid, 2-phenyl-, (15,25)- (9CI) (CA INDEX

Absolute stereochemistry. Rotation (+).

RN 249580-35-6 CAPLUS CN Cyclopropanecarboxylic acid, 2-phenyl-, 1-methylethyl ester, (1R, ZR)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

L7 ANSWER 16 OF 139 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1999:593598 CAPLUS
131:336754
Catalytic asymmetric cyclopropanation using a new chiral .beta.-diketone Cu(II) complex as a catalyst
AUTHOR(S): Xu, Yu, Wang, Zhong Yi, You, Tian Pa
Department of Chemistry, University of Science and Technology of China, Hefei, 230026, Peop. Rep. China
SOURCE: Chinese Chemical Letters (1998), 9(7), 607-608
CODEN: CCLEE7, ISSN: 1001-8417
PUBLISHER: Springer-Verlag Singapore Pte. Ltd.
Journal
LANGUAGE: English
OTHER SOURCE(s): English
used for the asym. cyclopropanation of styrene with diazo esters. A optical yield (.apprx.90%) was achieved. The effect of the structure of

substrate on the enantioselectivity was studied. Both chem. yield and optical yield were reduced when the steric bulky substrate was employed.

IT 5861-31-4P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); (Reactant or reagent)
(asym. cyclopropanation catalyzed by chiral .beta.-diketone Cu(II)
complex)
S861-31-4 CAPLUS
Cyclopropanecarboxylic acid, 2-phenyl-, methyl ester, {1R,2R}-rel-(CA INDEX NAME) Relative stereochemistry.

946-38-3P 946-39-4P 5682-61-1P
23020-15-TP 249580-35-6P 249580-36-TP
RL: SPN (Synthetic preparation), PREP (Preparation)
(asym. cyclopropanation catalyzed by chiral .beta.-diketone Cu(II)
complex)
946-38-3 CAPLUS
Cyclopropanecarboxylic acid, 2-phenyl-, ethyl ester, (1R,2S)-rel-(CA INDEX NAME)

Relative stereochemistry.

ANSWER 16 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

RN 249580-36-7 CAPLUS CN Cyclopropanecarboxylic acid, 2-phenyl-, 1-methylethyl ester, (1R,2S)-rel-(9C1) (CA INDEX NAME)

REFERENCE COUNT: THERE ARE 8 CITED REFERENCES AVAILABLE FOR RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 17 OF 139 CAPLUS COPYRIGHT 2002 ACS ACCESSION NUMBER: 1999:162346 CAPLUS DOCUMENT NUMBER: 130:224602 DOCUMENT NUMBER: TITLE: 130:224602
Process and Catalysts for the preparation of lower alkyl cyclopropanecarboxylate esters Kaufhold, Manfred: Feld, Marcel Huels A.-G., Gernany Ger. Offen., 4 pp. CODEN: GWXXEX INVENTOR(S):
PATENT ASSIGNEE(S):
SOURCE: DOCUMENT TYPE: LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION: PATENT NO. KIND DATE APPLICATION NO. DATE DE 19738072 A1 19990304 DE 1997-19738072 19970901 EP 900777 A1 19990310 EP 1998-113771 19980723 EP 900777 B1 20020410 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO
JP 11152250 A2 19990608 JP 1998-245037 19980831
PRIORITY APPLM. INFO:. DE 1997-19738072 A 19970901
AB Lower alkyl cyclopropanecarboxylate esters (e.g., Et cyclopropanecarboxylate) are prepd. in high yield and selectivity by the esterification of a stoichiometric excess of cyclopropanecarboxylic to a lower alkanol in an esterification zone at 100-200.degree. in presence of an acid esterification catalyst (e.g., alkylbenzenesulfonic acids) with distn. of the reaction water and unatity of alc. from the reaction zone.

IT 1759-53-1DP, Cyclopropanecarboxylic acid, lower alkyl esters
2668-37-3P, Methyl cyclopropanecarboxylate 4606-07-3P,
Ethyl cyclopropanecarboxylate 50128-01-0P
RL: IMF (Industrial manufacture); PREP (Preparation)
(process and catalysts for the prepn. of lower alkyl
cyclopropanecarboxylate esters)
RN 1759-53-1 CAPLUS
CN Cyclopropanecarboxylic acid (6CI, 7CI, 8CI, 9CI) (CA INDEX NAME) small

Д CO2H

2868-37-3 CAPLUS Cyclopropanecarboxylic acid, methyl ester (6CI, 7CI, 8CI, 9CI) (CA INDEX NAME)

L7 ANSWER 18 OF 139 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1998:74169 CAPLUS
DOCUMENT NUMBER: 128:127594
Highly Enantioselective Ring Opening of Cyclic TITLE: Anhydrides to Isopropyl Hemiesters with Ti-TADDOLates: An Alternative to Hydrolytic Enzymes? Jaeschke, Georg, Seebach, Dieter Laboratorium fuer Organische Chemie, AUTHOR (5): CORPORATE SOURCE: Eidgenoessische Hochschule ETH-Zentrum, Zurich, CH-8092, Sw Journal of Organic Chemistry (1998), 63(4), SOURCE: 1190-1197 CODEN: JOCEAH; ISSN: 0022-3263 American Chemical Society Journal PUBLISHER: DOCUMENT TYPE: UAGE: English
The Lewis acid mediated transfer of an alkoxide ligand from the LANGUAGE: chiral ligand sphere of Ti-TADDOLate (1) to cyclic meso anhydrides to afford the corresponding hemiesters is described. By using this method a variety of ty or structurally different anhydrides can be converted to iso-Pr hemiesters with high enantioselectivities (enantiomer ratios up to 99:1). We have also investigated Lewis acidic titanium complexes which differ from 1 in the chiral ligand or the alkoxide ligand that is transferred. Finally, Finally, a catalytic version, which allows the substoichiometric use of Ti-TADDOLate ADDOLate
in the presence of stoichiometric amts. of Al(Oi-Pr)3, is presented.
201815-26-1P
RL: SPN (Synthetic preparation); PREP (Preparation)
(asym. ring opening of meso anhydrides to iso-Pr hemiesters with
Ti-TADDOLates)
201815-26-1 CAPUS
1,2-Cyclopropanedicarboxylic acid, 3,3-dimethyl-, mono(1-methylethyl)
ester, cis-(+)- (9CI) (CA INDEX NAME)

Rotation (+). Absolute stereochemistry unknown.

L7 ANSWER 17 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

4606-07-9 CAPLUS Cyclopropanecarboxylic acid, ethyl ester (6CI, 7CI, 8CI, 9CI) (CA NAME)

60128-01-0 CAPLUS Cyclopropanecarboxylic acid, propyl ester (9CI) (CA INDEX NAME)

1759-53-1, Cyclopropanecarboxylic acid
RL: RCT (Reactant), RACT (Reactant or reagent)
(process and catalysts for the prepn. of lower alkyl
cyclopropanecarboxylate esters)
1759-53-1 CAPLUS
Cyclopropanecarboxylic acid (6CI, 7CI, 8CI, 9CI) (CA INDEX NAME)

L7 ANSWER 19 OF 139 CAPLUS COPYRIGHT 2002 ACS ACCESSION NUMBER: 1997:218556 CAPLUS DOCUMENT NUMBER: 126:211727 TITLE: Investigation

126:211727
Investigation of the Effects of the Structure and Chelate Size of Bis-oxazoline Ligands in the Asymmetric Copper-Catalyzed Cyclopropanation of Olefins: Design of a New Class of Ligands Bedekar, Ashutosh V.; Koroleva, Elise B.;

AUTHOR(S): Andersson,

CORPORATE SOURCE:

Pher G. Department of Organic Chemistry Institute of Chemistry, Uppsala University, Uppsala, S-75121,

Swed. SOURCE: 2518-2526 Journal of Organic Chemistry (1997), 62(8),

CODEN: JOCEAH; ISSN: 0022-3263 American Chemical Society Journal English PUBLI SHER:

DOCUMENT TYPE: LANGUAGE: GI

A set of novel, C2-sym. bis-oxazoline ligands have been synthesized by mounting two oxazoline rings onto an optically active 1,3-dioxolane backbone. This design allows for the control of both orientation as well

as the proximity of the oxazolinyl R-groups around the reactive site.

Aз a result of the twist imparted by the 1,3-dioxolane ring, the

stereogenic

ogenic owazolinyl substituents can be brought either toward or away from the complexed metal in a controllable fashion. Starting from L-amino

and either L- or D-tartaric acid, two sets of ligands: (I; R1 = benzvl

yl, i-Pr, t-Bu, sec-Bu, R2 = H and II; R1 = i-Pr, t-Bu, R2 = H) were synthesized and evaluated in the copper-catalyzed cyclopropanation of olefins. The comparison of benzyl and iso-Pr derivs. of these ligands with previously reported five- and six-membered bis-oxazolines clearly indicates the beneficiary effect of the larger chelate size and the chiral

tether of the tartrate-derived ligand. The effect of the different exazolinyl groups along with the different substituents on the dioxolane tethers was also investigated. The influence of the alkyl group of

ANSWER 19 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued) diazoacetate was studied, and the diazoacetate derived from (-)-8-phenylmenthol was found to be superior to (-)-menthyl diazoacetate. The cyclopropanation of vinyl acetate, a relatively unexplored

substrate

for this reaction, furnished cyclopropanol derivs. in good optical

for this reaction, furnished cyclopropanol derivs. in good optical purity.

IT 141694-54-4P
RL: SPN (Synthetic preparation), PREP (Preparation)
(60% ee, effects of the structure and chelate size of bis-coxazoline
ligands in the asym. copper-catalyzed cyclopropanation of olefins)
RN 141694-54-4 CAPLUS
CN Cyclopropanecarboxylic acid, 2-(acetyloxy)-, ethyl ester,
(1R, 2S)-rel(9CI) (CA INDEX NAME)

Relative stereochemistry.

IT 141694-55-5P
RL: SPN (Synthetic preparation); PREF (Preparation)
(641 ee; effects of the structure and chelate size of
bis-oxacoline
ligands in the asym. copper-catalyzed cyclopropanation of olefins)
RN 141694-55-5 CAPLUS
CN cyclopropanecarboxylic acid, 2-(acetyloxy)-, ethyl ester,
(1R, ZR)-rel(9CI) (CA INDEX NAME)

Relative stereochemistry.

RL: SPN (Synthetic preparation); PREP (Preparation) (744 de; effects of the structure and chelate size of bis-oxazoline

bis-oxazoline
ligands in the asym. copper-catalyzed cyclopropanation of olefins)
RN 188052-75-7 CAPLUS
CN Cyclopropanecarboxylic acid, 2-(acetyloxy)-, 5-methyl-2-(1-methylethyl)cyclohexyl ester,
[1R-[1.alpha.[1R*.2R*),2.beta.,5.alpha.]](9C1) (CA INDEX NAME)

L7 ANSWER 19 OF 139 CAPLUS COPYRIGHT 2002 ACS

Relative stereochemistry.

67489-30-9P 67528-67-0P

SFN (Synthetic preparation); FREP (Preparation) (89% de; effects of the structure and chelate size of

(894 de; errects of the second control of clefins)
bis-oxazoline
ligands in the asym. copper-catalyzed cyclopropanation of clefins)
RN 67489-30-9 CAPLUS
CN Cyclopropanecarboxylic acid, 2-phenyl-, (1R, 2S, 5R)-5-methyl-2-(1-methylethyl) cyclohexyl ester, (1R, 2S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

67528-67-0 CAPLUS Cyclopropanecarboxylic acid, 2-phenyl-, (1R,2S,5R)-5-methyl-2-(1-methylethyl)cyclohexyl ester, (1R,2R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RL: SPN (Synthetic preparation); PREP (Preparation)
(91% de; effects of the structure and chelate size of

bis-oxazoline
ligands in the asym. copper-catalyzed cyclopropanation of olefins)
RN 180185-09-5 CAPLUS
CN Cyclopropanecarboxylic acid, 2-phenyl-, 5-methyl-2-(1-methyl-1phenylathyl) cyclohexyl ester,
[1R-[1.alpha.[1R*, 25*), 2.beta., 5.alpha.]](9CI) (CA INDEX NAME)

Absolute stereochemistry.

L7 ANSWER 19 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)
Absolute stereochemistry.

96426-88-99
RL: SPN (Synthetic preparation); PREF (Preparation)
(844 ee; effects of the structure and chelate size of bis-oxazoline
ligands in the asym. copper-catalyzed cyclopropanation of olefins)
96426-88-9 CAPUS
Cyclopropanecarboxylic acid, 2-phenyl-, 1,1-dimethylethyl ester,
(1R,2S)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

II 188052-76-8P
RL: SPN (Synthetic preparation); PREP (Preparation)
(88% de: effects of the structure and chelate size of bis-oxazoline
ligands in the asym. copper-catalyzed cyclopropanation of olefins)
RN 188052-76-8 CAPLUS
CN Cyclopropanecarboxylic acid, 2-(acetyloxy)-, 5-methyl-2-(1methylethyl) cyclohexyl ester,
[IR-[1.alpha.[R*, 25*], 2.beta., 5.alpha.]](9CI) (CA INDEX NAME)

Absolute stereochemistry.

939-90-2P RL: SPN (Synthetic preparation); PREP (Preparation) (88% ee; effects of the structure and chelate size of bis-oxazoline ligands in the asym. copper-catalyzed cyclopropanation of olefins) 939-90-2 CAPLUS clopropanecarboxylic acid, 2-phenyl-, (1R,2R)-rel- (9CI) (CA INDEX

ANSWER 19 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

180036-70-8P

IT 180036-70-8P
RL: SRN (Synthetic preparation); PREP (Preparation)
(964 de: effects of the structure and chelate size of bis-oxazoline ligands in the asym. copper-catalyzed cyclopropanation of olefins)
RN 180036-70-8 CAPLUS
CN Cyclopropanecarboxylic acid, 2-phenyl-, 5-methyl-2-(1-methyl-1-phenylethyl) cyclohexyl ester,
[1R-[1.alpha.[1R*, 2R*, 2.beta., 5.alpha.]](9CI) (CA INDEX NAME)

Absolute stereochemistry.

IT 97-71-2P 34702-97-1P 34716-60-4P
RL: PNU (Preparation, unclassified): PREP (Preparation)
(effects of the structure and chelate size of bis-oxazoline ligands in

nds in the asym. copper-catalyzed cyclopropanation of olefins) 97-71-2 CAPLUS Cyclopropanecarboxylic acid, 2-phenyl-, ethyl ester (7CI, 8CI, 9CI)

INDEX NAME)

RN 34702-97-1 CAPLUS

ANSWER 19 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued) Cyclopropanecarboxylic acid, 2-phenyl-, ethyl ester, {1R,2S}- (9CI) INDEX NAME)

Absolute stereochemistry. Rotation (-).

34716-60-4 CAPLUS Cyclopropanecarboxylic acid, 2-phenyl-, ethyl ester, (1R,2R)- (9CI) INDEX NAME)

Absolute stereochemistry. Rotation (-).

IT 53692-74-3P 132098-61-4P 180036-71-9P
188052-74-5P
RL: SPN (Synthetic preparation), PREP (Preparation)
(effects of the structure and chelate size of bis-cxazoline
ligands in
the asym. copper-catalyzed cyclopropanation of olefins)
RN 53692-74-3 CAPLUS
CN Cyclopropanecarboxylic acid, 2,2-diphenyl-, (R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

RN 132098-61-4 CAPLUS
CN Cyclopropanecarboxylic acid, 2-methyl-2-phenyl-, 5-methyl-2-(1-methylethyl) cyclohexyl ester,
[IR-[1.alpha.[IR*,2R*),2.beta.,5.alpha.]](9CI) (CA INDEX NAME)

Absolute stereochemistry.

L7 ANSWER 19 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

L7 ANSWER 19 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

180036-71-9 CAPLUS Cyclopropanecarboxylic acid, 2,2-diphenyl-, 1,1-dimethylethyl ester, RN CN (1R) -(9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 188052-74-6 CAPLUS
CN Cyclopropanecarboxylic acid, 2-methyl-2-phenyl-, 5-methyl-2-(1-methylethyl)cyclohexyl ester,
[1R-[1.alpha.[1*, 25*], 2.beta., 5.alpha.]](9CI) (CA INDEX NAME)

Absolute stereochemistry.

IT 5279-78-7P
RL: SPM (Synthetic preparation); PREF (Preparation) (the acid is 88% eee effects of the structure and chelate size of bis-oxazoline ligands in the asym. copper-catalyzed cyclopropanation of olefins)
RN 5279-78-7 CAPLUS
CN Cyclopropanecarboxylic acid, 2-phenyl-, 1,1-dimethylethyl ester, (1R,2R)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

L7 ANSWER 20 OF 139 CAPLUS COPYRIGHT 2002 ACS ACCESSION NUMBER: 1997:186323 CAPLUS DOCUMENT NUMBER: 126:185892 TITLE: Preparation of .alpha.-cg

Preparation of .alpha.-cyanobenzyl esters from

acyl

halides, phenoxybenzaldehyde, and metal cyanides Kanechika, Tatsuo, Uehara, Toshiki Sumitomo Chemical Co, Japan Jpn. Kokai Tokkyo Koho, 5 pp. CODEN: JKCKAF INVENTOR(S):
PATENT ASSIGNEE(S):
SOURCE:

DOCUMENT TYPE: LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION: Patent Japanese 1

KIND DATE APPLICATION NO. DATE

A2 19970107 JF 1995-154524 19950621
CASREACT 126:1858927 MARPAT 126:185892 PATENT NO. JP 09003029 OTHER SOURCE(S):

CN
$$R^1$$
 R^2 R^3 R^4 Q X^1 X^1

AB The title esters I (R = Q, Q1, Q2, Q3; R1-8 = H, linear or branched lower alkyl; X1 = halo) are prepd. by treatment of RCOX (R = same as above; X =

halo) with 3-PhOC6H4CHO (II) and alkali metal or alk. earth metal

cyanides
in a two-phase solvent composed of inert org. solvents and H2O in the
presence of phase-transfer catalysts and RSCO2H (R9 = same as R
or C6H4OPh-3). A toluene soln. of II and 3-PhOC6H4CO2H (III) was

dropwise to an aq. soln. of NaCN and PhCH2Et3N+ Cl- at 5.degree..

L7 ANSWER 20 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued) Subsequently a toluene soln. of 2,2,3,3-tetramethylcyclopropanecarbonyl chloride was added dropwise to the above reaction mixt. While

continuing

the addn. of the first soln. and the mixt. was further stirred for 1

after the finish of addn. of both solns. to give 99.8% 3-phenoxy-.alpha.-cyanobenzyl 3,3-tetramethylcyclopropanecarboxylate with purity 95.5%, vs. 97.0 and 84.9%, resp., for a control reaction using

g
no III.
39515-41-89
RL: HMF (Industrial manufacture); SPN (Synthetic preparation); PREP
(Preparation)
(prepn. of phenoxy-alpha.-cyanobenzyl esters from acyl halides,
phenoxybenzaldehyde, and metal cyanides in presence of carboxylic
acida)

pacids)
3acids)
3acids)
Sacids)
Solidarian CAPLUS
Cyclopropanecarboxylic acid, 2,2,3,3-tetramethyl-, cyano(3-phenoxyphenyl)methyl ester (9CI) (CA INDEX NAME)

15641-58-4, 2,2,3-3-Tetramethylcyclopropanecarboxylic acid RL: RCT (Reactant): RACT (Reactant or reagent) (prepn. of phenoxy-alpha.-cyanobenzyl esters from acyl halides, phenoxybenzaldehyde, and metal cyanides in presence of carboxylic acids)

acids) 15641-58-4 CAPLUS Cyclopropanecarboxylic acid, 2,2,3,3-tetramethyl- (6CI, 8CI, 9CI)

INDEX NAME)

ANSWER 21 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued) study, unclassified); SFN (Synthetic preparation); BIOL (Biological study); PEPE (Preparation) (syntheses of (carboxycyclopropyl)glycine analogs and their characterization to ionotropic glutamate receptors) 17857-96-2 CAPLUS

Cyclopropaneacetic acid, .alpha.-amino-2-carboxy-, (.alpha.5, 1R, 25) -(9CT)

(CA INDEX NAME)

Absolute stereochemistry.

185041-29-6 CAPLUS Cyclopropaneacetic acid, .alpha.-amino-2-carboxy-3-ethenyl-, [1R-[1.alpha.(5*),2.alpha.,3.beta.]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

185041-32-1 CAPLUS

Cyclopropaneacetic acid, .alpha.-amino-2-carboxy-3-ethyl-, [1R-[1.alpha.(S*),2.alpha.,3.beta.]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

185041-58-1P 185041-60-5P 185041-61-6P 185041-62-7P RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation);

(Reactant or reagent)

ANSWER 21 OF 139 CAPLUS COPYRIGHT 2002 ACS SSION NUMBER: 1996:673288 CAPLUS MENT NUMBER: 126:47527

ACCESSION NUMBER: DOCUMENT NUMBER: TITLE: Syntheses of trans-3'-substituted-CCG-IV analogs

their characterization to ionotropic glutamate

receptors Shimamoto, Keiko; Shigen, Yasushi; Nakajima, AUTHOR (5):

Terumi: Yumoto, Noboru: Yoshikawa, Susumu: Ohfune,

Yasufumi Suntory Inst. Bioorganic Res., Mishima, 618, Japan Bioorganic & Medicinal Chemistry Letters (1996), 6(20), 2381-2386 CODEN: BMCLES; ISSN: 0960-894X Elsevier CORPORATE SOURCE:

CODEN: EMCLES; ISSN: 0960-894A

PUBLISHER: Elsevier

DOCUMENT TYPE: Journal

LANGUAGE: Buglish

A Trans-3'-substituted-CCG-IV analogs [CCG-IV is {2carboxycyclopropy]) glycine, the substituent is Et or ethenyl) were
efficiently synthesized via an intramol. cycloaddn. of a

diazoacetamide

using a chiral rhodium catalyst. These analogs evoked marked
depolarization through ionotropic glutamate receptors on the spinal
motoneurons or the kainate-sensitive dorsal root C-fiber of new born

rats

even though their binding affinities for the receptors on rat brain synaptic membranes were relatively low. These results suggest that

depolarizing action on C-fiber is not caused by the activation of

kainate
high affinity sites.

IT 135658-96-7
RL: BAC (Biological activity or effector, except adverse); BSU
(Biological)
study, unclassified); BIOL (Biological study)
(syntheses of (carboxycyclopropyl)glycine analogs and their
characterization to ionotropic glutamate receptors)
RN 135658-36-7 CAPLO
CN Cyclopropaneacetic acid,
alpha.-amino-2-carboxy-3-[(phenylmethoxy)methyl], [IR-[1.alpha.(S¹), 2.alpha., 3.beta.]]- (GA INDEX NAME)

Absolute stereochemistry.

117857-96-2DP, derivs. 185041-29-6P 185041-32-1P RL: BAC (Biological activity or effector, except adverse); BSU (Biological

ANSWER 21 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued) (syntheses of (carboxycyclopropyl)glycine analogs and their characterization to ionotropic glutamate receptors) 185041-58-1 CAPLUS Cyclopropanecarboxylic acid, [[(1,1-dimethylethoxy)carbonyl]amino]-2[[(1,1-dimethylethoxyl)dimethylsilyl]oxy]ethyl]-3-ethenyl-, methyl

ester, [15-[1.alpha.,2.alpha.(R*),3.beta.]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

185041-60-5 CAPLUS
Cyclopropaneacetic acid,
pha.-[[(1,1-dimethylethoxy)carbonyl]amino]-2ethenyl-3-(methoxycarbonyl)-, methyl ester, [1R[1.alpha.(S*),2.beta.,3.alpha.]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 185041-61-6 CAPLUS
CN Cyclopropanecarboxylic acid,
2-[1-[([1,1-dimethylethoxy)carbonyl]amino]-2[([1,1-dimethylethyl]dimethylsilyl]oxylethyl]-3-ethyl-, methyl ester,
[18-[1.alpha.,2.alpha.(R*),3.beta.]]- (9CI) (CA INDEX NAME)

ANSWER 21 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

RN 185041-62-7 CAPLUS
CN Cyclopropaneacetic acid,
.alpha.-[[(1,1-d:methylethoxy)carbonyl]amino]-2ethyl-3-(methoxycarbonyl)-, methyl ester, [1r[1.alpha.(5*),2.beta.,3.alpha.]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

ANSWER 22 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued) and pentane as solvent also enhanced the enanticselectivity of the process. The synthetic utility of this chem. was illustrated by its application to the synthesis of all four stereoisomers of l-amino-2-phenylcyclopropanecarboxylic acid. The occurrence of the hiv highly

y stereoselective cyclopropanations was rationalized by a model in which the

ligands were considered to adopt a D2 sym. arrangement. The

tetrakis[.mu.-[1-[(4-dodecylphenyl)sulfonyl]-L-prolinato-02:02']]dirhodium

catalyzed cyclopropanation of 2-diazo-4-phenyl-3-butenoic acid Me

ester
with styrene gave [IS-[1.alpha.,1(E),2.beta.]]-2-phenyl-1-(2-phenylethenyl) cyclopropanecarboxylic acid Me ester (I). I was

into (15-cis)-1-amino-2-phenylcyclopropanecarboxylic acid

elaborateu
into (15-cis)-1-amino-2-phenylcyclopropanecarboxylic aciu
hydrochloride
(II) and (1R-trans)-1-amino-2-phenylcyclopropanecarboxylic acid
hydrochloride (III).

1 153062-73-eP 18800-59-0P 158800-60-3P
180322-77-4P
RL: RCT (Reactant); SFN (Synthetic preparation); PREP (Preparation)
(prepn. of cyclopropanecarboxylates by rhodium
(arylsulfonyl)prolinatecatalyzed asym. cyclopropanation of vinyldiazomethanes with
alkenes)
RN 153062-73-8 CAPLUS
CN Cyclopropanecarboxylic acid, 2-phenyl-1-[(1E)-2-phenylethenyl]-,
methyl
ester, (1S, 2S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Double bond geometry as shown.

RN 158800-59-0 CAPLUS CN 1,1-Cyclopropanedicarboxylic acid, 2-phenyl-, monomethyl ester, (1S-cis)-(9CI) (CA INDEX NAME)

Absolute stereochemistry.

L7 ANSWER 22 OF 139 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1596:394106 CAPLUS
DOCUMENT NUMBER: 125:167460
TITLE: ASYMMAPTOGO A

Asymmetric Cyclopropanations by Rhodium(II) N-(Arylsulfonyl)prolinate Catalyzed Decomposition

of

Vinyldiazomethanes in the Presence of Alkenes. Practical Enantioselective Synthesis of the Four Stereoisomers of 1-Amino-2-phenylcyclopropanearchoxylic acid Davies, Huw M. L.; Bruzinski, Paul; Hutcheson,

AUTHOR(S): Debra

K.; Kong, Norman; Fall, Michael J. Department of Chemistry, State University of New

CORPORATE SOURCE: Buffalo, NY, 14260-3000, USA J. Am. Chem. Soc. (1996), 118(29), 6897-6907 CODEN: JACSAT; ISSN: 0002-7863

DOCUMENT TYPE: LANGUAGE: OTHER SOURCE(S): GI Journal English CASREACT 125:167480

AB The rhodium N-(arylsulfonyl)prolinate catalyzed decompn. of vinyldiazomethanes in the presence of alkenes yielded a very general method for the synthesis of functionalized cyclopropanes in a highly diastereoselective and enantioselective mode. A detailed study was undertaken to det. the key factors that control the enantioselectivity of this process. The highest levels of enantioselectivity were obtained using cyclic N-(arylsulfonyl)amino acids as ligands for the dirhodium catalyst, and the optimized catalyst was tetrakis[N-[(4-dodecylphenyl)sulfonyl]-[L)-prolinato]dirhodium. The carbenoid structure had a crit effect on the degree of asym. induction.

ecton, and the combination of a small electron-withdrawing group such as a Me ester and an electron-donating group such as vinyl or Ph resulted in highest levels of enantioselectivity. The use of electron neutral

ANSWER 22 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued) 158800-60-3 CAPLUS (1-1-Cyclopropanedicarboxylic acid, 2-phenyl-, dimethyl ester, (s)-(CA INDEX NAME)

Absolute stereochemistry.

alkenes

180322-77-4 CAPLUS 1,1-Cyclopropanedicarboxylic acid, 2-phenyl-, monomethyl ester, (1R-trans)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

72397-56-9P 128700-57-2P 154841-83-5P 154841-84-6P 154941-85-7P 154941-86-6P 1549641-93-2-2P 180193-33-3P 154965-99-9P 180193-2-2P 1801932-81-0P 180322-82-1P 180322-83-2P 180322-84-3P 180322-887-6P

RE: SPN (Synthetic preparation); PREP (Preparation) (prepn. of cyclopropanecarboxylates by rhodium (arylsulfonyl)prolinatecatalyzed asym. cyclopropanation of vinyldiazomethanes with

alkenes)
RN 72397-56-9 CAPLUS
CN 1,1-Cyclopropanedicarboxylic acid, 2-phenyl-, dimethyl ester, (R)-(9CI)

(CA INDEX NAME)

Absolute stereochemistry.

L7 ANSWER 22 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)
RN 128700-57-2 CAPLUS
CN Cyclopropanecarboxylic acid, 2-phenyl-1-[(1E)-2-phenylethenyl]-,
methyl

ester, (1R, 2R) - rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.
Double bond geometry as shown.

RN 154841-83-5 CAPLUS
CN Cyclopropanecarboxylic acid, 2-(acetyloxy, - ...
methyl
ester, [1.slpha.,1(E),2.beta.]- (9CI) (CA INDEX NAME) 154841-83-5 CAPLUS Cyclopropanecarboxylic acid, 2-(acetyloxy)-1-(2-phenylethenyl)-,

Relative stereochemistry. Double bond geometry as shown.

154841-84-6 CAPLUS Cyclopropanecarboxylic acid, 2-butyl-1-(2-phenylethenyl)-, methyl (1.alpha.,1(E),2.beta.]- (9CI) (CA INDEX NAME)

Relative stereochemistry.
Double bond geometry as shown.

154841-85-7 CAPLUS Cyclopropanecarboxylic acid, 2-ethyl-1-(2-phenylethenyl)-, methyl [1.alpha.,1(E),2.beta.]- (9CI) (CA INDEX NAME)

Relative stereochemistry. Double bond geometry as shown.

L7 ANSWER 22 OF 139 CAPLUS COPYRIGHT 2002 ACS Double bond geometry as shown.

180322-75-2 CAPLUS Cyclopropanecarboxylic acid, 2-(4-chlorophenyl)-1-(2-phenylethenyl)-methyl ester, [15-[1.alpha.,1(E),2.beta.]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.

180322-76-3 CAPLUS No. 10052-10-3 CN Cyclopropanecarboxylic acid, 2-(4-methoxyphenyl)-1-(2-phenylethenyl)-, methyl ester, [15-[1.alpha.,1(E),2.beta.]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.

RN 180322-81-0 CATANA CN Cyclopropanecarboxylic acid, 2-phenyi-, ... ester, [1S-[1.alpha.,1(E),2.beta.]]- (9CI) (CA INDEX NAME) 180322-81-0 CAPLUS Cyclopropanecarboxylic acid, 2-phenyl-1-(2-phenylethenyl)-, ethyl

Absolute stereochemistry.
Double bond geometry as shown.

ANSWER 22 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

154841-86-8 CAPLUS Cyclopropanecarboxylic acid, 2-(1-methylethyl)-1-(2-phenylethenyl)-, methyl ester, [1.alpha.,l(E),2.beta.]- (9CI) (CA INDEX NAME)

Relative stereochemistry. Double bond geometry as shown.

154966-39-9 CAPLUS Cyclopropanecarboxylic acid, 2-ethoxy-1-(2-phenylethenyl)-, methyl ester, [1.alpha.,1(E),2.beta.]- (9CI) (CA INDEX NAME)

Relative stereochemistry. Double bond geometry as shown.

190193-32-2 CAPLUS
Cyclopropanecarboxylic acid, 2,2-dimethyl-1-(2-phenylethenyl)-, methyl ester, (E)- {9CI} (CA INDEX NAME)

180193-33-3 CAPLUS Cyclopropanecarboxylic acid, 2,3-dimethyl-1-(2-phenylethenyl)-, methyl ester, [1.alpha.,1(E),2.beta.,3.beta.]- (9CI) (CA INDEX NAME)

Relative stereochemistry.

ANSWER 22 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

180322-82-1 CAPLUS Cyclopropanecarboxylic scid, 2-phenyl-1-(2-phenylethenyl)-, ethylethyl ester, [IS-[1.alpha.,1(E),2.beta.]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.

180322-83-2 CAPLUS
Cyclopropanecarboxylic acid, 2-phenyl-1-{2-phenylethenyl}-,
1,1-dimethylethyl ester, [1S-[1.alpha.,1(E),2.beta.]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.

180322-84-3 CAPLUS
1,1-Cyclopropanedicarboxylic acid, 2-phenyl-, monomethyl ester, (15-trans)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 180322-CN 1,1-Cyclopropans-(1R-cis)-(9CI) (CA INDEX NAME) 180322-87-6 CAPLUS
1,1-Cyclopropanedicarboxylic acid, 2-phenyl-, monomethyl ester, L7 ANSWER 22 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued) Absolute stereochemistry.

L7 ANSWER 23 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

RN 178033-28-8 CAPLUS
CN Cyclopropanecarboxylic acid, 2-acetyl-, (1R-cis)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

ANSWER 23 OF 139 CAPLUS COPYRIGHT 2002 ACS SSION NUMBER: 1996:315725 CAPLUS MENT NUMBER: 125:58630 ACCESSION NUMBER:

DOCUMENT NUMBER: TITLE:

Asymmetric [2 + 1] Cycloaddition Reactions of 1-Seleno-2-silylethene Yamazaki, Shoko: Tanaka, Mayumir Yamabe, Shinichi Department of Chemistry, Nara University of AUTHOR(S): CORPORATE SOURCE:

Education,

Nara, 630, Japan J. Org. Chem. (1996), 61(12), 4046-4050 CODEN: JOCEAH; ISSN: 0022-3263 Journal English CASREACT 125:58630 SOURCE:

DOCUMENT TYPE: LANGUAGE: OTHER SOURCE(S): GI

AB The reaction of (E)-1-(phenylseleno)-2-(trimethylsilyl)ethene (1) and vinyl ketones, e.g., CH2:CHAc, in the presence of a chiral Lewis acid prepd. from Ticl4, Ticl1ryl4 (R)- or (S)-1,1'-binaphthol (BINOL), and mol. sieve M54A gave enantiomerically enriched cis cyclopropane

mol. Sleve MSAA gave enantiomerically enriched dis cyclopropane products, e.g., I (3a). The enantiomeric excess and chem. yield varied depending on the ratio of TiCl4 and Ti(OiPr)4 to 1. Reproducible results (43-47% ee/33-41% yields) for 3a were obtained using 1.1 equiv of TiCl4, 0.54-0.65

0.54-0.65

equiv of Ti(OiPr)4, and 1.65 equiv of BINOL. The obsd.
enantioselectivity

was explained by consideration of the structure of the postulated
intermediates, alkowy Ti-carbonyl complexes, via ab initio MO calcus.
IT 178033-26-69 178033-28-89

RL: SFN (Synthetic preparation); FREP (Preparation)
(stereoselective cycloaddn. reaction of selenosilylethene with

vinyl

vinyl
ketones to give cis-cyclopropanes)

RN 178033-26-6 CAPLUS
CN Cyclopropanecarboxylic acid, 2-acetyl-, methyl ester, (1R-cis)- (9CI)
(CA
INDEX NAME)

Absolute stereochemistry. Rotation (-).

L7 ANSWER 24 OF 139 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1996:181373 CAPLUS
DOCUMENT NUMBER: 124:342187
TITLE: Lipas-catalyzed resoluti Lipase-catalyzed resolution of chiral acids or alcohols using mixed carboxylic-carbonic

anhydrides AUTHOR(S):

Guibe-Jampel, Eryka; Chalecki, Zbigniew; Bassir, Mohamed; Gelo-Pujic, Mirjana Lab. Reactions Selectives Supports, Univ. CORPORATE SOURCE:

Paris-Sud,

SOURCE:

Orsay, 91405, Fr.
Tetrahedron (1996), 52(12), 4397-402
CODEN: TETRAB; ISSN: 0040-4020
Journal
English CODEN: TETRAB; ISSN: 0040-4020

DOCUMENT TYPE: Journal
LANGUAGE: English
AB Mixed carboxylic-carbonic anhydrides are efficient irreversible acyl
transfer reagents for lipase catalyzed esterification in org. media

can be used for the resoln. of chiral carboxylic acids or alcs.

1447-14-9P
RL: BPN (Biosynthetic preparation); RCT (Reactant); BIOL (Biological study); PREP (Preparation)
(lipase-catalyzed resoln. of chiral acids or alcs. using mixed carboxylic-carbonic anhydrides)
1447-14-9 CAPLUS
Cyclopropanecarboxylic acid, 2,2-dichloro-1-methyl- (6CI, 7CI, 8CI, 8CI,

(CA INDEX NAME)

$$\begin{array}{cccc} \text{C1} & \text{Me} \\ \hline & \text{C1} & \text{Co}_2\text{H} \end{array}$$

176438-82-7P
RL: RCT (Reactant), SPN (Synthetic preparation), PREF (Preparation)
(lipase-catalyzed resolm, of chiral acids or alcs. using mixed
carboxylic-carbonic anhydrides)
176438-82-7 CAPLUS
(Cyclopropanecarboxylic acid, 2,2-dichloro-1-methyl-, anhydride with
2-methylpropyl hydrogen carbonate (9CI) (CA INDEX NAME)

L7 ANSWER 25 OF 139 CAPLUS COPYRIGHT 2002 ACS ACCESSION NUMBER: 1995:898887 CAPLUS DOCUMENT NUMBER: 123:313432 123:313432
Preparation of 2-fluorocyclopropanemethanol and 2-fluorocyclopropanecarboxylic acid
Yukimoto, Jusuke; Ehata, Tsutomu; Tojo, Toshiaki;
Inanaga, Minakor Sato, Koji
Daiichi Seiyaku Co, Japan
Jpn. Kokai Tokkyo Koho, 11 pp.
CODEN: JKXXAF
Patent
Japanese DOCUMENT NUMBER: TITLE: INVENTOR (S): PATENT ASSIGNEE (S): SOURCE: DOCUMENT TYPE: LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

PATENT NO. KIND DATE JP 07109237 OTHER SOURCE(S): 19931012

AB The title compds. (I; R = OR1 or CO2R2; wherein R1 = H or CH2Ph; R2 = $H_{\rm r}$

lower alkyl), useful as intermediate for an antibacterial agent

(III), are prept. by reductive debromination of 2-bromo-2-fluorocyclopropane derivs.

(II; R = same as above), involving (1) treatment of I with an alkali

alk. earth metal in the presence of a H-source, and in particular,

an alc., (2) treatment of I with Zn in H20-contg. acetone, or (3) catalytic hydrogenation of I in the presence of a base, in

and ethylenediamine. Thus, 259 mg II (R = PhCH20) (cis/trans isomer ratio

= 1.04) (prepn. given) was dissolved in 5 mL MeCH followed by adding

mg Na metal and the resulting mixt. was stirred at room temp. to give 28.2% trans-I (R = PhCH2O) and cis-I (R = PhCH2O). The starting

material

II (R = PhCH2O) was prepd. in 59% yield by carbene insertion of allyl
benzyl ether with Br2CHF in the presence of KOH and MgSO4 under
ice-cooling and hydrogenated over 5% Pd-C in MeOH to give 98% II (R =

L7 ANSWER 25 OF 139 CAPLUS COPYRIGHT 2002 ACS

164342-85-2 CAPLUS Cyclopropanecarboxylic acid, 2-bromo-2-fluoro-, ethyl ester, trans-(9CI) (CA INDEX NAME)

Relative stereochemistry.

84388-71-6P, Ethyl cis-2-fluorocyclopropanecarboxylate 84388-72-7P, Ethyl trans-2-fluorocyclopropanecarboxylate 105919-34-4P, cis-2-Fluorocyclopropanecarboxylic acid 130340-04-4P, trans-2-Fluorocyclopropanecarboxylic acid RL: SPN (Synthetic preparation) (prepn. of fluorocyclopropanemethanol and -carboxylic acid vs. by

(CA INDEX NAME)

Relative stereochemistry.

84388-72-7 CAPLUS Cyclopropanecarboxylic acid, 2-fluoro-, ethyl ester, (1R,2S)-rel-(9CI) (CA INDEX NAME)

Relative stereochemistry.

ANSWER 25 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued) HOCH20) which was oxidized with KMn04 in acetone to II (R = H02C). II (R = HOCH2O) was dispolved in acetone/H2O (80/20 vol. ratio) and after adding
3.92 g Zn powder, refluxed for 16 h to give a mixt. of cis- and = HOCH2O) in 80.8% yield. II (R = HO2C) was dissolved in BuOH/Et3N vol. ratio) followed by adding 460 mg Na metal and the resulting . vas stirred at room temp. for 1 h to give 10% trans-I (R = H02C) and 9.6% cis-I (R = H02C).

161492-61-1P, cis-2-Bromo-2-fluorocyclopropanecarboxylic acid 161492-62-27, trans-Z-Bromo-2-fluorocyclopropanecarboxylic acid 164342-84-1P, Ethyl cis-2-bromo-2-fluorocyclopropanecarboxylate 164342-87-27, Ethyl rans-2-bromo-2-fluorocyclopropanecarboxylate RL: RCT (Reactant) SPN (Synthetic preparation) PREF (Preparation) (intermediate) prepn. of fluorocyclopropanemethanol and -carboxylic acid derivs. by reductive debromination of bromofluorocyclopropanemethanol and -carboxylic acid derivs-1 (ARUS Cyclopropanearboxylic acid derivs-) (CA INDEX Cyclopropanearaboxylic acid, 2-bromo-2-fluoro-, cis- (9CI) (CA INDEX Cyclopropanearaboxylic acid, 2-bromo-2-fluoro-, cis- (9CI) (CA INDEX Cyclopropanecarboxylic acid, 2-bromo-2-fluoro-, cis- (9CI) (CA INDEX NAME)

Relative stereochemistry.

161492-62-2 CAPLUS Cyclopropanecarboxylic acid, 2-bromo-2-fluoro-, trans- (9CI) (CA

Relative stereochemistry.

164342-84-1 CAPLUS Cyclopropanecarboxylic acid, 2-bromo-2-fluoro-, ethyl ester, cis-(CA INDEX NAME)

Relative stereochemistry.

ANSWER 25 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

105919-34-4 CAPLUS Cyclopropanecarboxylic acid, 2-fluoro-, (1R,2R)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

130340-04-4 CAPLUS Cyclopropanecarboxylic acid, 2-fluoro-, (1R,2S)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

ANSWER 26 OF 139 CAPLUS COPYRIGHT 2002 ACS SSION NUMBER: 1995:718026 CAPLUS MENT NUMBER: 123:338860 ACCESSION NUMBER: DOCUMENT NUMBER: TITLE: The mechanism of RuO4-mediated oxidations of isotope effects, solvent effects and substituent effects Bakke, Jan M.; Froehaug, Astrid E. Organic Chemistry Lab., Norwegian Inst. CORPORATE SOURCE: Technology, Trondheim, N-7034, Norway Acta Chem. Scand. (1995), 49(8), 615-22 CODEN: ACHSE7, ISSN: 0904-213X Journal SOURCE: DOCUMENT TYPE: DOCUMENT TYPE: Journal
LANGUAGE: English
AB The mechanism of the Ru04-mediated oxidm. of ethers to esters has
been investigated. Oxidn. of cyclopropylmethyl Me ether gave Me cyclopropanecarboxylate. No rearranged products were obsd. On RuO-oxidn. of benzyl Me ether and p-methoxybenzyl Me ether in CCl4 with oxidn. of benzyl Me ether and p-methoxybenzyl Me ether in CC14 with NaIC4
as stoichiometric oxidant, no chlorinated products were obsd. A series of
4-substituted benzyl Me ethers was oxidized with RuO4-NaIO4. A correlation of the rate of the reaction with Hammett .sigma.-values gave a .rho. of -1.7, indicating only a moderate charge sepn. in the transition state (TS). Benzyl Me ether (1) was oxidized in a series of acetone-water mixts. From these expts., a m-value of 0.11 was obtained, indicating a non-polar TS for the reaction. PhcHOOCH3 (2) and PhcD2OCH3 (3) were oxidized and two deuterium isotope effects, one of 6.1 .+-. 0.4 and another of 1.3 .+-. 0.1 were obtained. If one assumes a one-step reaction mechanism, the value of 1.3 would be a large .alpha-secondary isotope effect, indicating a change in the hybridization of the benzylic carbon carbon during the reaction. .alpha.-Methylbenzyl Me ether (4) was oxidized at a seventh of the rate of 1, despite the fact that 4 would have given a more stable carbocation than 1. These conflicting pieces of evidence are difficult to rationalize with a hydride or hydrogen abstraction mechanism Instead it is proposed that the reaction proceeds by either a concerted reaction or by a reversible oxidative addn. of the ether to RuO4 followed Day a slow concerted step to give the product.

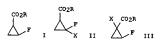
1759-53-1P, Cyclopropanecarboxylic acid 2668-37-3P,

Methyl cyclopropanecarboxylate

RL: PNU (Preparation, unclassified); PREP (Preparation)

(isotope effects, solvent effects and substituent effects and mechanism

ANSWER 27 OF 139 CAPLUS COPYRIGHT 2002 ACS
SSION NUMBER: 1995:648076 CAPLUS
MENT NUMBER: 123:55420
E: Selective dehalogenation method
Akiba, Toshifumi; Ikeya, Takanobu; Kawanishi,
Hirofumi; Yukimoto, Yusuke; Kamihara, Shinji; ACCESSION NUMBER DOCUMENT NUMBER: TITLE INVENTOR(S): Ebata. TSULOMU DAI/Chi Pharmaceutical Co., Ltd., Japan PCT Int. Appl., 23 pp. CODEN: PIXXD2 Patent PATENT ASSIGNEE(S): SOURCE: DOCUMENT TYPE: LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION: KIND DATE APPLICATION NO. DATE PATENT NO. A1 19950216 WO 9504712 WO 1994-JP1280 19940803 W: US RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE EP 712831 EP 712831 A1 19960522 B1 19991103 EP 1994-923063 19940803 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE PT, SE
AT 186292
ES 2140547
JP 07097353
US 5780669
PRIORITY APPLN. INFO.: AT 1994-923063 19940803 ES 1994-923063 19940803 JP 1994-183173 19940804 US 1996-592402 19960201 JP 1993-194423 19930805 E 19991115 T3 20000301 A2 19950411 20000301 19950411 19980714



OTHER SOURCE(S):

AB Fluorocyclopropanecarboxylates I (R = H, alkyl) were prepd. by catalytic hydrogenolysis of halofluorocyclopropanecarboxylates II or III (R =

CASREACT 123:55420; MARPAT 123:55420

H,

alkyl; X = Br, Cl) in the presence of a base and a metal catalyst

. Thus, hydrogenolysis of cis- and trans-2-chloro-2-fluoro-1cyclopropanecarboxylic acid Et ester in EtOH in the presence of
1,2-diaminoethane and Raney Ni at room temp. for 24 h gave 88.94

trans-2-fluoro-1-cyclopropanecarboxylic acid Et ester.
130340-02-2 130340-13-5 161492-61-1
161492-62-2
2018 1877 (Presented of the presence of the pres

RL: RCT (Reactant)

L7 ANSWER 26 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued) of Ru04-mediated oxidns. of ethers)
RN 1759-53-1 CAPLUS

Cyclopropanecarboxylic acid (6CI, 7CI, 8CI, 9CI) (CA INDEX NAME)

Д CO2H

2068-37-3 CAPLUS Cyclopropanecarboxylic acid, methyl aster (6CI, 7CI, 8CI, 9CI) (CA INDEX NAME)

ANSWER 27 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)
(selective dehalogenation of halofluorocyclopropanecarboxylates)
130340-02-2 CAPLUS
Cyclopropanecarboxylic acid, 2-chloro-2-fluoro-, cis- (9CI) (CA INDEX NAME)

Relative stereochemistry.

130340-13-5 CAPLUS Cyclopropanecarboxylic acid, 2-chloro-2-fluoro-, trans- (9CI) (CA NAME)

Relative stereochemistry.

161492-61-1 CAPLUS Cyclopropanecarboxylic acid, 2-bromo-2-fluoro-, cis- (9CI) (CA INDEX NAME)

Relative stereochemistry.

161492-62-2 CAPLUS Cyclopropanecarboxylic acid, 2-bromo-2-fluoro-, trans- (9CI) (CA INDEX NAME)

Relative stereochemistry.

IT 152237-12-2P 152237-13-3P 155687-12-0P 1355697-14-2P RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation) (selective dehalogenation of halofluorocyclopropanecarboxylates) 152237-12-2 CAPLUS L7 ANSWER 27 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)
CN Cyclopropanecarboxylic acid, 2-chloro-2-fluoro-, ethyl ester, cis-CN ((9CI) (CA INDEX NAME)

Relative stereochemistry.

RN 152237-13-3 CAPLUS
CN Cyclopropanecarboxylic acid, 2-chloro-2-fluoro-, ethyl ester, trans(9CI) (CA INDEX NAME)

Relative stereochemistry.

RN 155687-12-0 CAPLUS CN 1,2-Cyclopropanedicarboxylic acid, 1-chloro-, 1-methyl ester (9CI) INDEX NAME)

155687-14-2 CAPLUS 1,2-Cyclopropanedicarboxylic acid, 1-chloro-, 2-(1,1-dimethylethyl) 1-methyl ester (9C1) (CA INDEX NAME)

84388-71-6P 105919-34-4P 130340-04-4P 155687-11-9P 155687-15-3P 155687-16-4P

ANSWER 27 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued) Cyclopropanecarboxylic acid, 1-chloro-2-fluoro-, methyl ester, trans-(SCI) (CA INDEX NAME)

Relative stereochemistry.

155687-16-4 CAPLUS Cyclopropanecarboxylic acid, 1-chloro-2-fluoro-, methyl ester, cis-RN CN (9CI) (CA INDEX NAME)

Relative stereochemistry.

RN 157042-45-0 CAPLUS CN Cyclopropanecarboxylic acid, 1-chloro-2-fluoro-, cis- (9CI) (CA INDEX 157042-45-0 CAPLUS NAME)

Relative stereochemistry.

157042-46-1 CAPLUS Cyclopropanecarboxylic acid, 1-chloro-2-fluoro-, trans- (9CI) (CA CN C, INDEX NAME)

Relative stereochemistry.

L7 ANSWER 27 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued) 157042-45-0P 157042-46-1P RL: SPN (Synthetic preparation), PREP (Preparation) (selective dehalogenation of halofluorocyclopropanecarboxylates) 84388-71-6 CAPLUS Cyclopropanecarboxylic acid, 2-fluoro-, ethyl ester, (IR, ZR)-rel-(9CI) (CA INDEX NAME)

Relative stereochemistry.

105919-34-4 CAPLUS Cyclopropanecarboxylic acid, 2-fluoro-, (1R,2R)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

130340-04-4 CAPLUS Cyclopropanecarboxylic acid, 2-fluoro-, (1R,2S)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

155687-11-9 CAPLUS Cyclopropanecarboxylic acid, 2-fluoro-, methyl ester, trans- (9CI)

RN 155687-15-3 CAPLUS

ACCESSION NUMBER: DOCUMENT NUMBER: TITLE:

ANSWER 28 OF 139 CAPLUS COPYRIGHT 2002 ACS
ISSION NUMBER: 1995:408778 CAPLUS

MENT NUMBER: 122:314202

E: 2-Fluorocyclopropanecarboxylate esters, their preparation, and preparation of 2-fluorocyclopropanedicarboxylate esters therefrom the state of the

INVENTOR(S):
PATENT ASSIGNEE(S):
SOURCE:

DOCUMENT TYPE:

Japanese 1 LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

KIND DATE APPLICATION NO. DATE

A2 19941220 JF 1993-134399 19930604
CASREACT 122:314202, MARPAT 122:314202 PATENT NO. JP 06345693 OTHER SOURCE(S):

Fluorocyclopropanedicarboxylate esters I (R = lower alkyl), a process

the prepn. of I by treatment of CH2(CO2R)2 (II, R = lower alkyl) with FCHXCH2Y (X, Y = Cl, Br) in hydrophlic solvents in the presence of

or in hydrophobic solvents in the presence of bases and phase-transfer catalysts, and a process for the prepn. of the title esters III (R = lower slkyl), useful as intermediates for drugs, by decarboxylation

in the presence of bases and phase-transfer catalysts are claimed. BrCHFCH2Br was added dropwise to a mixt. of II (R = Et),

K2CO3,
and Bu4NBr at 50.degree. over 4 h and the reaction mixt. was stirred

50.degree. for 5 h. After addn. of K2CO3 and dropwise addn. of

DICHICHZEF over 2 h, the reaction mixt, was further stirred for 10 h to give 65% I (R

- Et) (IV). A soln. contg. KOH, EtOH, and dioxane was added dropwise

mixt. of IV, 18-crown-6, and dioxane at room temp. and the reaction

was kept at room temp. for 3 h. The reaction mixt., after heating to remove EtOH, was refluxed at 100.degree. for 20 h to give 61% III (R

at trans/cis ratio 91:9.
IT 84388-71-6P 84388-72-7P 156816-78-3DP, lower

alkyl esters
RL: IMF (Industrial manufacture); SPN (Synthetic preparation); PREP

ANSWER 28 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)
(Freparation)
(prepn. of fluorocyclopropanecarboxylate esters)
84388-71-6 CAPLUS
Cyclopropanecarboxylic acid, 2-fluoro-, ethyl ester, {1R,2R}-rel-

(9CI) (CA INDEX NAME)

Relative stereochemistry.

RN 8430 CN Cyclopropan (9CI) (CA INDEX NAME) 84388-72-7 CAPLUS Cyclopropanecarboxylic acid, 2-fluoro-, ethyl ester, (1R,2S)-rel-

Relative stereochemistry.

156816-78-3 CAPLUS Cyclopropanecarboxylic acid, 2-fluoro- (9CI) (CA INDEX NAME)

163266-03-3P 163266-04-4DP, lower alkyl esters
RL: RCT (Reactant): SPN (Synthetic preparation): PREP (Preparation)
(prepn. of fluorocyclopropanecarboxylate esters)
163266-03-3 CAPLUS
1,1-Cyclopropanedicarboxylic acid, 2-fluoro-, diethyl ester (9CI)

INDEX NAME)

L7 ANSWER 29 OF 139 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1995:347099 CAPLUS
DOCUMENT NUMBER: 122:133463
Process and catalysts for the preparation of lower alkyl
3-(2-chloro-3,3,3-trifluoroprop-1-en-1-yl)2,2-dimethylcyclopropanecarboxylate insecticide intermediates
INVENTOR(5): Bowden, Martin Charles; Turnbull, Michael

Drysdale
PATENT ASSIGNEE(S):
SOURCE: Zeneca Ltd., UK PCT Int. Appl., 16 pp. CODEN: PIXXD2 Patent

DOCUMENT TYPE:

r AM.	LLI	E: ACC. INFOR	NUM.	COU	NT:	Eng 2	lish										
	PA'	TENT	NO.							A	PPLI	CATI	ON N	٥.	DATE	;	
	WO	9427	951		 A	1	1994	1208		W	0 19	94-G	B113	9	1994	0525	
		W:	AU,	BB,	BG,	BR,	BY,	CA,	CN,	CZ,	FI,	GE,	ΗU,	JP,	KG,	KP,	KR,
,			LK,	LV,	MD,	MG,	MN,	MW,	NO,	NZ,	PL,	RO,	RU,	SD,	sĸ,	тJ,	TT,
•			US,	110	101												
						DE	ntr	T.C	ED	CD	CD	7 17	7.00			NL,	ъ.
		va.	м,	DE,	un,	DE,	DK,	EJ,	FK,	GD,	GR,	ıe,	11,	ьо,	MC,	MT.	Ρ1,
•			RF.	B.T.	CF	C.C.	CT	CM	GA	GN	MT.	MD	NE,	SN.	Tη	TG	
	GB	2278		,	A	1										0524	
					В	2	1997	0730		•						0021	
	AU	2278 9468	006		A	1	1994	1220		A	U 19	94-6	8006		1994	0525	
	AU	6966	83		В	2	1998	0917									
	BR	9406	657		A		1996	0130		В	R 19	94-6	657		1994	0525	
	EP	6966 9406 7003	75		A	1	1996	0313		E	P 19	94-9	1630)	1994	0525	
	EP	7003	75		В	1	1998	1223									
		R:	ΑT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	ΙĒ,	IT,	LI,	LU,	MC,	NL,
•	SE														_		
	CN	1124	955		A		1996	0619		С	N 19	94-1	92281	3	1994	0525	
	CN	1065 0950 8328	235		В		2001	0502		_							
	UP	0950	9//0		T	2	1997	0213		ŭ	P 15	794-5	2583	•	1994	0525	
	EP	8328	/J	שמ	CU A	, אם ז	1338	04UI	TP D	CP.	5 T 2	77-1	2153.	·	1994	SE,	D m
		٠.	A1,	ÞĿ,	Cn,	DE,	DR,	EJ,	rr,	GD,	GR,	11,	ы,	LU,	NL,	SE,	PI,
	RU	2120	936		С	1	1998	1027		R	U 19	95-1	2256	3	1994	0525	
	AT	1748	96		E		1999	0115		A	T 19	94-9	16300)	1994	0525	
	ES	2125	456		T	3	1999	0301		E	5 19	94-9	1630)	1994	0525	
	CZ	2804	91		В	6	2000	0412		C	Z 19	95-3	109		1994	0525 0525	
		1306															
		1097			A	1	2000	0726					09793				
		1792			В	1	2000	0831		P	L 19	94-3	1174	5	1994	0525 0525	
		2811			В	6	2000	1211		S	K 19	95-1	494		1994	0525	
		1168			В	1	2001	0730		R	0 19	95-2	057		1994	0525	
	FI	9505	702		A		1995	1127		F	I 19	95-5	702		1995	1127 1127 0725	
	NO	9504	813		A		1995	1127		N	0 15	95-4	813		1995	1127	
	CN	1220	255		. А		1999	0623		0	N 19	98-1	1670	•	1998	0725	
K10	JK(T)	/ APP	LN.	INFO	. :					GB 1	993-	1105	4	A	1993	0528	

L7 ANSWER 28 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

163266-04-4 CAPLUS
1,1-Cyclopropanedicarboxylic acid, 2-fluoro- (9CI) (CA INDEX NAME)

L7 ANSWER 29 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

EP 1994-916300 A3 19940525
IL 1994-103793 A3 19940525
IL 1994-103793 A3 19940525
OTHER SOURCE(S): CASREACT 122:133463; MARRAT 122:133463
AB Lower alkyl esters of 3-(2-chloro-3,3,3-trifluoroprop-1-en-1-yl)-2,2dimethyl-cyclopropanecarboxylic acid, useful as insecticide and acaricide
intermediates (no data), are prepd. by reacting
CF3CXCICH(OH)CH:C(CH3)2 (X

CI. BT) with a tri(C1-4 alkyl) orthoacetate in the presence of a catalytic amt. of an acid catalyst at an elevated temp. for a sufficient time to produce ester CF3CXCICH:G(CH3)2CD20R (R = C1-4 alkyl) which is treated with gboreq.1 molar equiv. of a base.

IT 74509-46-4DP, lower alkyl esters 83376-81-2P
RL: IMF (Industrial manufacture); SPN (Synthetic preparation); PREP (Preparation)
(Preparation)
(Process and catalysts for the prepn. of)
RN 74509-46-4 CAPLUS
CN Cyclopropanecarboxylic acid,
3-(2-chloro-3,3,3-trifluoro-1-propenyl)-2,2-dimethyl- (9CI) (CA INDEX NAME)

RN 83376-81-2 CAPLUS
CN Cyclopropanecarboxylic acid,
3-(2-chlor-3,3,3-trifluoro-1-propenyl)-2,2dimethyl-, methyl ester, [1.slpha.,3.slpha.(Z)]- (9CI) (CA INDEX
NAME)

Relative stereochemistry.
Double bond geometry as shown.

1T 71461-40-OP
RL: IMF (Industrial manufacture); SPN (Synthetic preparation); PREP (Preparation)
(process and catalysts for the prepn. of alkyl 3-(2-chloro-3,3,3-trifluoroprop-1-en-1-yl)-2,2-dimethylcyclopropanecarboxylate insecticide intermediates)
RN 71461-40-O CAPLUS
CN Cyclopropanecarboxylate acid, 3-(2-chloro-3,3,3-trifluoro-1-propenyl)-2,2-

ANSWER 29 OF 139 CAPLUS COPYRIGHT 2002 ACS dimethyl-, ethyl ester (9CI) (CA INDEX NAME) (Continued)

L7 ANSWER 30 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

RN 159587-29-8 CAPLUS CN Cyclopropanecarboxylic acid, 1-chloro-2-ethyl-, trans- (9CI) (CA INDEX NAME)

Relative stereochemistry.

159507-30-1 CAPLUS Cyclopropanecarboxylic acid, 1-chloro-2-(1,1-dimethylethyl)-, trans-CN (9CI) (CA INDEX NAME)

Relative stereochemistry.

159587-31-2 CAPLUS Cyclopropanecarboxylic acid, 1-chloro-2,3-dimethyl-, (1.alpha.,2.alpha.,3.beta.) - (9CI) (CA INDEX NAME)

Relative stereochemistry.

RN 159587-33-4 CAPLUS CN Cyclopropanecarboxylic acid, 1-chloro-2-(chloromethyl)-, trans-(9CI) (CA INDEX NAME)

Relative stereochemistry.

CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1995:92504 CAPLUS
DOCUMENT NUMBER: 122:30975
TITLE: 5ynthesis. 29. Cyclopropyl building blocks for organic

Convenient synthesis of substituted 1-chlorocyclopropanecarboxylic acids Coudret, J. L.; Ernst, K.; de Meijere, A.; AUTHOR (S):

Waegell, B. CORPORATE SOURCE: Lab. Stereochim., Fac. Sci. St-Jerome, Marseille, F-13397, Fr.
Synthesis (1994), (9), 920-2
CODEN: SYNTBF, ISSN: 0039-7881
Journal
English
CASREACT 122:30975

SOURCE:

DOCUMENT TYPE: LANGUAGE: OTHER SOURCE(S): GI

AB Catalytic oxidn. of various substituted 1-chloro-1-trichloroethemylcyclopropanes
[I]RI=Me, Eq. L=Bu, GR2CI,SIME3,RISSIME3R2=R3=R
4-HR:R1=R3=Me, R2=R4-HR:R1=R2=R3=R4-Me) (RIR2)= (CH2)2, R3=R4-H] with
ruthenium tetroxide generated in situ produces the corresponding
1-chlorocyclopropanecarboxylic acids (II; R1,R2,R3,R4 as above) in
good

yood
yields (78 to 95%).

IT 159587-28-79 159587-29-89 159587-30-19
159587-31-29 159587-33-49 159587-34-59
RL: SPN (Synthetic preparation), FREP (Preparation)
(synthesis of substituted 1-chlorocyclopropanecarboxylic acids by oxidn. of tetrachloroethenylcyclopropanes in presence of ruthenium tetroxide)
RN 159587-28-7 CAPLUS
CN Cyclopropanecarboxylic acid, 1-chloro-2-methyl-, trans- (9CI) (CA INDEX NAME)

Relative stereochemistry.

L7 ANSWER 30 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

RN 159587-34-5 CAPLUS
CN Cyclopropanecarboxylic acid, 1-chloro-2-(trimethylsilyl)-, trans-(9CI) (CA INDEX NAME)

159587-36-7 CAPLUS Cyclopropanecarboxylic acid, 1-chloro-2-ethyl-, 1,1-dimethylethyl (9CI) (CA INDEX NAME)

L7 ANSWER 31 OF 139 CAPLUS COPYRIGHT 2002 ACS ACCESSION NUMBER: 1994:605742 CAPLUS DOCUMENT NUMBER: 121:205742

TITLE: Preparation of optically active bis-oxazolines and use

of their copper complexes in prepn. of chrysanthemates.

chrysantnemates. Masamune, Satoru; Lowenthal, Richard E. Massachusetts Institute of Technology, USA INVENTOR(S): PATENT ASSIGNEE(S): SOURCE:

U.S., 10 pp. CODEN: USXXAM DOCUMENT TYPE: LANGUAGE: Patent English

FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

PATENT NO. APPLICATION NO. DATE KIND DATE US 5298623 OTHER SOURCE(S): 19940329 US 1991-789748 19911108 CASREACT 121:205742

AB M.Xn [M = CuOTf, CuOBu-t, CuClO4(MeCN)2, Cu(OTf)2, Cu(OBu-t)2, Cu(ClO4)2r
X = bisoxazoline I, II, etc.; n = 1,2; R = H, Me; Ph groups may be substituted], were claimed for use in catalytic cyclopropanation of trisubstituted and cis-1,2-disubstituted olefins. Thus, cis-(+)-2-amino-1,2-dispubstituted olefins. Thus, cis-(+)-2-amino-1,2-dispubstituted olefins. Thus, circled with Et3N in CH2Cl2 at 0-23.degree. to give 72% bisoxazoline I. I

was stirred with CuOTf benzene complex in CH2C12 for 1 h; the mixt.

filtered into a soln. of 2,5-dimethyl-2,4-hexadiene in CH2C12 follo

dropwise addn. of dicyclohexylmethyl diazoacetate (prepn. given) at 0.degree. The resulting mixt. was warmed to 23.degree. and stirred

to give 84% chrysanthemate ester, which was hydrolyzed to chrysanthemic

acid using aq. NaOH/EtOH.

ANSWER 31 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

ANSWER 31 OF 139 CAPLUS COFYRIGHT 2002 ACS (Continued) 4638-92-0P, (+)-trans-Chrysanthemic acid 55701-03-6P 157826-02-3P 157904-70-6P

137826-02-3P 157904-70-6P
RL: SPN (Synthetic preparation), PREP (Preparation)
(prepn. of, using optically active copper-bisoxazoline
cyclopropanation
catalyst)
RN 4638-92-0 CAPLUS
Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2-methyl-1-propenyl)-,
(1R,3R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

55701-03-6 CAPLUS

Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-,(1R,3S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

157826-02-3 CAPLUS

137828-02-3 CAPLUS Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-, dicyclohexylmethyl ester, (1R-trans)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

157904-70-6 CAPLUS Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2-methyl-1-propenyl)-, dicyclohexylmethyl ester, (1R-trans)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L7 ANSWER 32 OF 139 CAPLUS COPYRIGHT 2002 ACS ACCESSION NUMBER: 1994:605697 CAPLUS DOCUMENT NUMBER: 121:2056697 Linear Catalogue 121:205687
Lipase catalyzed kinetic resolution of racemic (.+-.)2,2-dimethyl-3-(2-methyl-1-propenyl) cyclopropanecarboxyl esters Rao, A. Bhaskar; Rehman, H.; Krishnakumari, B.;

AUTHOR(S): Yadav,

Yadav,

CORPORATE SOURCE:

Div. Org. Chem. I, Indian Inst. Chem. Technol.,
Hyderabad, 500 007, India

SOURCE:

Tetrahedron Lett. (1994), 35(16), 2611-14

CODEN: TELEAY, ISSN: 0040-4039

DOCUMENT TYPE:
LANGUAGE:

OTHER SOURCE(s):

CASREACT 121:205687

AB Optically active (IR) (-) and (1S) (+)-trans-Chrysanthemic acid and its
esters were prepd. from corresponding racemic Me ester by lipase
mediated

Absolute stereochemistry.

4638-92-0 CAPLUS

Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2-methyl-1-propenyl)-, (1R,3R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

26770-96-7 CAPLUS

Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2-methyl-1-propenyl)-,

ester, (15,35) - (9CI) (CA INDEX NAME)

Absolute stereochemistry.

41641-27-4 CAPLUS Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2-methyl-1-propenyl)-, ester, (1s,3s) - (9CI) (CA INDEX NAME)

Absolute stereochemistry.

83213-30-3 CAPLUS Cyclopropancathoxylic acid, 2,2-dimethyl-3-(2-methyl-1-propenyl)-, 1-methylethyl ester, (15-trans)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

157942-47-7 CAPLUS Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2-methyl-1-propenyl)-, 2,2,2-trichloroethyl ester, (15-trans)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L7 ANSWER 33 OF 139 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1994:579124 CAPLUS
DOCUMENT NUMBER: 121:179124
TITLE: 5tereoselectivity and generality of the palladium-catalyzed cyclopropanation of .alpha..beta.-unsaturated carboxylic acids derivatized with Oppolzer's sultam Vallgaarda, Jerk; Appelberg, Ulf; Coeregh,

AUTHOR(S): Ingeborg;

CORPORATE SOURCE:

Hacksell, Uli Dep. Org. Pharm. Chem., Uppsala Biomed. Cent., Uppsala, 5-751 23, Swed. J. Chem. Soc., Perkin Trans. 1 (1994), (4),

SOURCE: 461-70

CODEN: JCPRB4: ISSN: 0300-922X

DOCUMENT TYPE: LANGUAGE: OTHER SOURCE(S):

Journal English CASREACT 121:179124

AB .alpha., beta.-Unsatd. carboxylic acids derivatized with camphosultam I as a chiral auxiliary has been stereoselectively cyclopropanated. The selective reaction gave cyclopropanated products with the IR, ZR abs. configuration, as indicated by the optical rotations and X-ray structure detn. The temp. dependence of the reaction was studied with three substrates. The highest stereoselectivity was obtained at temps. above 25 .degree.C. Branching at the .alpha.-, or .beta.-carbons disfavors complete conversion, and electron-withdrawing substituents at these positions seen to prevent the reaction. The auxiliary was removed by using titanium(IV) isopropoxide in benzyl alc. followed by alk. hydrolysis of the intermediate ester. Thus, treating sultam I with 2 methoxycinnamoyl chloride followed by cyclopropanation with diazomethane

gave cyclopropane II which was deprotected and converted in 3 steps to the

ANSWER 33 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)
potent 5-HT1A receptor agonist (1R,2s)-2-(2-hydroxyphenyl)-N,Ndipropylcyclopropylamine (III).
157518-48-48
RL: RCT (Reactant); SPN (Synthetic preparation); PREF (Preparation)
(prepn. and sapon. of)
157518-48-4 CAPLUS
Cyclopropanecarboxylic acid, 2-[2-(trifluoromethyl)phenyl]-, methyl
r,

ster, trans- (9CI) (CA INDEX NAME)

Relative stereochemistry.

104131-70-6P 157518-49-5P
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)
104131-70-6 CAPLUS
Cyclopropanecarboxylic acid, 1,2-dimethyl-, methyl ester, (1R,2R)-rel(9CI) (CA INDEX NAME)

Relative stereochemistry.

RN CN (9CI)

157518-49-5 CAPLUS Cyclopropanecarboxylic acid, 2-[2-(trifluorcmethyl)phenyl]-, trans-

(CA INDEX NAME)

Relative stereochemistry.

3471-10-1P 5034-03-7P 10467-86-2P 51197-36-5P 110901-90-1P RL: SPN (Synthetic preparation); PREP (Preparation) (stereoselective prepn. of, use of chiral sultam intermediate for) 3471-10-1 CAPLUS

L7 ANSWER 33 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)
CN Cyclopropanecarboxylic acid, 2-phenyl-, (1R,2R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

5034-03-7 CAPLUS Cyclopropanecarboxylic acid, 2-(2-methoxyphenyl)-, (1R-trans)- (9CI) INDEX NAME)

Absolute stereochemistry.

10487-86-2 CAPLUS Cyclopropanecarboxylic acid, 2-methyl-, (1R,2R)- (9CI) (CA INDEX

Absolute stereochemistry.

51197-36-5 CAPLUS Ferrocene, (2-carboxycyclopropyl)-, stereoisomer (9CI) (CA INDEX

L7 ANSWER 34 OF 139 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1994:299012 CAPLUS
DOCUMENT NUMBER: 120:299012
TITLE: 3ystem
A convergent approach toward the tigliane ring
system
AUTHOR(S): Dauben, William G., Dinges, Jurgen; Smith, Dauben, William G.; Dinges, Jurgen; Smith,

Timothy C.
CORPORATE SOURCE:
94720, USA
SOURCE:

Dep. Chem., Univ. California, Berkeley, CA,

J. Org. Chem. (1993), 58(27), 7635-7 CODEN: JOCEAH; ISSN: 0022-3263 Journal

DOCUMENT TYPE:

LANGUAGE: OTHER SOURCE(S): GI English CASREACT 120:299012

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

A convergent synthesis of the C6,C9-oxido-bridged tigliane system I

been achieved. The central step of the synthesis was a rhodium(II) acetate-catalyzed tandem cyclization-cycloaddn. reaction $\ensuremath{\mathsf{C}}$

diazoacetoacetates II and III. A 1:1-ratio of the targeted ring

em I and its 45*, 105*-isomer IV were isolated since the A-ring piece was introduced in its racemic form. The identity of both products was confirmed by x-ray structural anal. The rhodium-promoted formation has

confirmed by X-ray structural anal. The rhodium-promoted formation of the B- and C-rings showed a remarkably high stereospecificity which was independent of the chirality at C-12 and either of trans-configurations of the C-4 and C-10 asym. centers.

1 38692-37-47 38692-38-59 67528-58-99
RL: RCT (Reactant): SFN (Synthetic preparation): PREP (Preparation) (prepn. and reaction of, in convergent synthetic approach to tigliane diterpene ring system)
RN 38692-37-4 CAPLUS
CN Cyclopropanecarboxylic acid, 3-formyl-2,2-dimethyl-, ethyl ester, (1R,3R)-rel-(9C1) (CA INDEX NAME)

Relative stereochemistry.

RN 38692-38-5 CAPLUS

ANSWER 33 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

110901-90-1 CAPLUS Cyclopropanecarboxylic acid, 2-(3-methoxyphenyl)-, (1R,2R)- (9CI) (CA INDEX NAME)

ANSWER 34 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued) Cyclopropanecarboxylic acid, 3-formyl-2,2-dimethyl-, ethyl ester, cis-(9C1) (CA INDEX NAME)

67528-58-9 CAPLUS Cyclopropanecarboxylic acid, 3-ethenyl-2,2-dimethyl-, cis- (9CI) (CA INDEX NAME)

Relative stereochemistry

L7 ANSWER 35 OF 139 CAPLUS COPYRIGHT 2002 ACS ACCESSION NUMBER: 1994:298097 CAPLUS DOCUMENT NUMBER: 120:298097

DOCUMENT NUMBER: TITLE:

.alpha.-Hydroxy esters as chiral auxiliaries in asymmetric cyclopropanations by

rhodium(II)-stabilized

vinylcarbenoids

AUTHOR(S): Cantrell, Davies, Huw M. L.; Huby, Nicholas J. S.;

CORPORATE SOURCE:

William R., Jr., Olive, Jennifer L.
Dep. Chem., Wake Forest Univ., Winston-Salem, NC, 27109, USA
J. Am. Chem. Soc. (1993), 115(21), 9468-79
CODEN: JACSAT, ISSN: 0002-7863

DOCUMENT TYPE: LANGUAGE: OTHER SOURCE(S): GI

Journal English CASREACT 120:298097

AB The use of several .alpha.-hydroxy esters as chiral auxiliaries for asym.

cyclopropanation with rhodium-(II)-stabilized vinylcarbenoids is presented. Thus, (E)-PhCH:CHC(COR):N2 [R = OCEMeCH2CO2Me, OCHPhCO2Me,

(25)-1-methoxy-3,3-dimethyl-1-oxo-2-Bu, etc.] reacted with PhCH:CH2 in the

persence of Rh2(OAc)4 to give cyclopropanes I and II. Use of either (R)-pantolactone or (S)-lactate allowed entry into both series of enantiomeric vinylcyclopropanes with predictable abs. stereochem.

and electronic modifications of the chiral auxiliary as well as catalyst structure were shown to have major effects on the asymminduction. These results were rationalized on the basis of an interaction

between the carbonyl oxygen of the chiral auxiliary and the carbenoid carbon. By combining the asym. cyclopropanation with a subsequent

rearrangement, an enantioselective entry into hydroazulenes was achie

The potential of the asym. cyclopropanation was illustrated by a short

synthesis of (lR, 2R)-phenylcyclopropane amino acid III. 153062-74-9P

ISSU62-74-9F (Reactant); SPN (Synthetic preparation); PREP (Preparation) (prepn. and aminolysis of) 153062-74-9 CAPLUS

L7 ANSWER 35 OF 139 CAPLUS COPYRIGHT 2002 ACS Double bond geometry as shown.

152978-94-4 CAPLUS

Cyclopropanecarboxylic acid, 2-phenyl-1-(2-phenylethenyl)-, 1-(methoxycarbonyl)-2,2-dimethylpropyl ester, [15-[1.alpha.(R*),1(E),2.beta.]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Double bond geometry as shown.

152978-95-5 CAPLUS

lazara-ya-5 CAPLUS (Cyclopropanecarboxylic acid, 2-phenyl-1-(2-phenylethenyl)-, 2-(dimethylamino)-1-methyl-2-oxoethyl ester, [15-[1.alpha.(R*),1(E),2.beta.]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown

152978-96-6 CAPLUS Cyclopropanecarboxylic acid, 2-phenyl-1-(2-phenylethenyl)-, 1-methyl-2-oxopropyl ester, [IS-[1.alpha.(5*),1(E),2.beta.]]- (9CI)

INDEX NAME)

L7 ANSWER 35 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)
CN 1,1-Cyclopropanedicarboxylic acid, 2-phenyl-,
mono(tetrahydro-4,4-dimethyl2-oxo-3-furanyl) ester, [1R-[1.alpha.(R*),2.beta.]]- (9CI) (CA INDEX
NAME)

Absolute stereochemistry.

138770-15-79 152978-92-2P 152978-93-3P 152978-94-4P 152978-95 152978-96-6P 153062-62-P1 153062-71-69 153062-71-69 153062-72-7P 153062-73-6P 153062-73-0P (Preparation) PREP (Preparation)

Aur ora (synthetic preparation); Fram (Freparation)
(prepan. of)
(N) 138770-15-7 CAPLUS
(N) Benzenacetic acid,
(alpha.-[[[2-phenyl-1-[2-phenylethenyl)cyclopropyl]car
booyl]owy]-, methyl ester (9CI) (CA INDEX NAME)

Cyclopropanecarboxylic acid, 2-phenyl-1-(2-phenylethenyl)-, 3-methoxy-1-methyl-3-oxopropyl ester (9CI) (CA INDEX NAME)

RN 152978-93-3 CAPLUS
CN Cyclopropanecarboxylic acid, 2-phenyl-1-(2-phenylethenyl)-,
1-(methoxycarbonyl)-2-methylpropyl ester,
[1S-[1.alpha.(R+),1(E),2.beta.]](9C1) (CA INDEX NAME)

Absolute stereochemistry

L7 ANSWER 35 Or 135 Absolute stereochemistry.
Double bond geometry as shown. ANSWER 35 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

153062-69-2 CAPLUS Cyclopropanecarboxylic acid, 2-phenyl-1-{2-phenylethenyl}-, 2-methoxy-1-methyl-2-oxoethyl ester, [IS-[1.alpha.(R*),1(E),2.beta.]]-(9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.

153062-70-5 CAPLUS Cyclopropanecarboxylic acid, 2-phenyl-1-{2-phenylethenyl}-, 2-methoxy-1-methyl-2-oxoethyl ester, [1R-[1.alpha.(S⁴),1(E),2.beta.]]-(SCI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.

153062-71-6 CAPLUS

The first carboxylic acid, 2-phenyl-1-(2-phenylethenyl)-,
1-(methoxycarbonyl)-2-methylpropyl ester,
[IR-[1.alpha.(S*),1(E),2.beta.]](9CI) (CA INDEX NAME)

Absolute stereochemistry.

153062-72-7 CAPLUS Cyclopropanecarboxylic acid, 2-phenyl-1-(2-phenylethenyl)-, 1-(methoxycarboxyl)-2,2-dimethylpropyl ester, [IR-[1.alpha.(5*),1(E),2.beta.]]- {9CI} (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.

153062-73-8 CAPLUS Cyclopropanecarboxylic acid, 2-phenyl-1-[(1E)-2-phenylethenyl]-, ester, (15,25) - (9CI) (CA INDEX NAME)

Absolute stereochemistry. Double bond geometry as shown.

153062-75-0 CAPLUS Cyclopropanecarboxylic acid, 2-phenyl-1-(2-phenylethenyl)-, 2-(dimethylamino)-1-methyl-2-oxoethyl ester, [1R-[1.alpha.(S*),1(E),2.beta.]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Double bond geometry as shown.

ANSWER 36 OF 139 CAPLUS COPYRIGHT 2002 ACS SSION NUMBER: 1994:269715 CAPLUS MENT NUMBER: 120:269715 ACCESSION NUMBER:

DOCUMENT NUMBER: TITLE:

Preparation of optically active diphosphinocyclopropanecarboxylic acid

derivatives as asymmetric allylation catalysts

INVENTOR(S): PATENT ASSIGNEE(S): SOURCE: asymmetric allylation catalyst: Minami, Susumu Nissan Chemical Ind Ltd, Japan Jpn. Kokai Tokkyo Koho, 5 pp. CODEN: JKXXAF Patent

DOCUMENT TYPE: LANGUAGE:

FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE JP 05306291 OTHER SOURCE(S): 2 19931119 JP 1992-106257 19920424 CASREACT 120:269715; MARPAT 120:269715 A2

AB The title derivs. I [R = H, Cl-6 alkyl; Rl, R2 = H, Cl-6 alkyl, (Cl-4 alkyl- or alkoxy-substituted) Ph; Z = PR22, P(0)R22] are prepd.

Prepn. of optically active compds. in the presence of I and transition metal compds.

or Pd compds. is also claimed. Refluxing a mixt. of Me3C

(-)-trans-2, 3-bis (diphenylphosphino)-1-methyl-1-cyclopropanecarboxylate [prepd. from Me3C .alpha.-chloropropionate and trans-1,2-bis (diphenylphosphinyl) ethene in 3 steps] and p-MeC6H4SO3H in C6H6

2 h
gave 71% (-)-trans-2,3-bis(diphenylphosphino)-1-methyl-1cyclproppanecarboxylic acid (II). A suspension of Pd acetate and II

THF was mixed with 2-cyclohexenyl acetate, then treated with a soln. 1-menthyl diethylphosphonoacetate in THF at 65.degree. for 5 h to

1001 1-menthyl (2-cyclohexenyl)diethylphosphonoacetate of 61% e.e. 141540-17-2P
RL: SPN (Synthetic preparation); PREP (Preparation) (prepn. and optical resoln. of)
141540-17-2 CAPUS
Cyclopropanecarboxylic acid, 2,3-bis(diphenylphosphinyl)-1-methyl-, 1,1-dimethylethyl ester, (1.alpha.,2.alpha.,3.beta.)- [9CI) (CA INDEX

ANSWER 35 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

ANSWER 36 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued) NAME)

Relative stereochemistry.

141540-18-3P 141540-19-4P 141610-79-9P
141610-80-2P
RL: SPN (Synthetic preparation), PREP (Preparation)
(prepn. of, as asym. allylation catalyst)
141540-18-3 CAPLUS
Cyclopropanecarboxylic acid, 2,3-bis(diphenylphosphino)-1-methyl-,
1,1-dimethylethyl ester, (1.alpha.,2.alpha.,3.beta.)-(-)- (SCI) (CA INDEX NAME)

Rotation (-). Absolute stereochemistry unknown.

141540-19-4 CAPLUS
Cyclopropanecarboxylic acid, 2,3-bis(diphenylphosphino)-1-methyl-,
{1.alpha.,2.alpha.,3.beta.}-(-)- (9CI) (CA INDEX NAME)

Rotation (-). Absolute stereochemistry unknown.

141610-79-9 CAPLUS
Cyclopropanecarboxylic acid, 2,3-bis(diphenylphosphino)-1-methyl-,
1,1-dimethylethyl ester, (1.alpha.,2.alpha.,3.beta.)-(+)- (9CI) (CA INDEX NAME)

L7 ANSWER 36 OF 139 CAPLUS COPYRIGHT 2002 ACS Rotation (+). Absolute stereochemistry unknown. (Continued)

141610-80-2 CAPLUS Cyclopropanecarboxylic acid, 2,3-bis(diphenylphosphino)-1-methyl-, (1.alpha.,2.alpha.,3.beta.)-(+)- (9CI) (CA INDEX NAME)

Rotation (+). Absolute stereochemistry unknown.

L7 ANSWER 37 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

39515-41-8P, Fenpropathrin
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of, from tetramethylcyclopropanecarboxylic acid)
39515-41-8 CAPLUS 17

Cyclopropanecarboxylic acid, 2,2,3,3-tetramethyl-, cyano(3-phenoxyphenyl)methyl ester (9CI) (CA INDEX NAME)

ANSWER 37 OF 139 CAPLUS COPYRIGHT 2002 ACS
SSION NUMBER: 1994:163677 CAPLUS
MENT NUMBER: 120:163677
E: Preparation of fenpropathrin
NTOR(S): Zhuo; Chen, Huilin; Li, Wuchong; et al.
Dalian Institute of Chemicophysics, Peop. Rep. ACCESSION NUMBER: ACCESSION NUMBER:
DOCUMENT NUMBER:
TITLE:
INVENTOR(S):
PATENT ASSIGNEE(S): China SOURCE: Faming Zhuanli Shenqing Gongkai Shuomingshu, 9 pp. CODEN: CNXXEV Patent Chinese DOCUMENT TYPE: LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE 19930324 CN 1991-106222 199 CASREACT 120:163677; MARPAT 120:163677 CN 1070186 19910830 OTHER SOURCE(S):

AB The title compd. (I) is prepd. from 2,2,3,3-tetramethylcyclopropanecarboxy lic acid via reaction of 2,2,3,3-tetramethylcyclopropanecarbonyl chloride

chloride

With m-phenoxybenzaldehyde and NaCN in the presence of a
phase-transfer

catalyst of the formula Cm-(OCH2CHR)nOH (Cm - fatty alkyl radical
with 20-30 carbon atoms; n = 3-15; R = H, Hel. E.g., 2,2,3,3tetramethylcyclopropanecarbonyl chloride (prepd. from 2,2,3,3tetramethylcyclopropanecarboxylic acid and SOCI2) in xylene contg.
R(OCH2CHMe) 90H (R = C22-23 fatty alkyl) (prepd. from C22-23 fatty
alc. and

alc. and 8 equiv 1,2-epoxypropane) was treated with m-phenoxybenzaldehyde and

for 3-5.5 h to give I.
15641-58-4, 2,2,3,3-Tetramethylcyclopropanecarboxylic acid
RL: PROC (Process)
(conversion of, into acid chloride)
15641-58-4 CAPLUS
Cyclopropanecarboxylic acid, 2,2,3,3-tetramethyl- (6CI, 8CI, 9CI) (CA
INDEX NAME)

ANSWER 38 OF 139 CAPLUS COPYRIGHT 2002 ACS

1994:76650 CAPLUS 120:76650

DOCUMENT NUMBER: TITLE: 120:76650 Mild, one-pot conversion of carboxylic acids into esters using phase transfer catalysis Puntambekar, Hemalata M.; Naik, D. G.; Kapadi, A.

AUTHOR (S):

Res. Inst., MACS, Pune, 411 004, India Indian J. Chem., Sect. B (1993), 32B(7), 793-4 CODEN: IJSBDB; ISSN: 0376-4699 CORPORATE SOURCE: SOURCE:

DOCUMENT TYPE: Journal

LANGUAGE: English
OTHER SOURCE(S): CASREACT 120:76650
AB Aliph. satd. and unsatd. acids, benzylic acids, and arom. acids in

were esterified by treatment with alkyl halides in the presence of an

aq.

soln. of K2CO3 and Bu4NBr as phase-transfer catalyst.
1759-53-1, Cyclopropanecarboxylic acid
RL: RCT (Reactant)
(esterification of, using one-pot procedure under phase transfer
catalysis)
1759-53-1 CAPLUS
Cyclopropanecarboxylic acid (6CI, 7CI, 8CI, 9CI) (CA INDEX NAME)

△ со2н

6887-83-8F, Ispropyl cyclopropanecarboxylate 54947-39-6P
, Butyl cyclopropanecarboxylate
RL: SPN (Synthetic preparation), PREF (Preparation)
(prepn. of, one-pot esterification procedure for)
6887-83-8 -CAPLUS
Cyclopropanecarboxylic acid, 1-methylethyl ester (9CI) (CA INDEX

54947-39-6 CAPLUS Cyclopropanecarboxylic acid, butyl ester (9CI) (CA INDEX NAME)

```
ANSWER 39 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)
US 5475027 A 19951212 US 1993-148817 19931108
US 5510379 A 19960423 US 1995-448817 19951025
US 5510347 A 19960423 US 1995-452603 19950525
US 5646511 A 19970211 US 1995-452606 19950525
US 5708004 A 19971230 US 1995-452187 19950525
US 5708004 A 19980113 US 1995-452606 19950525
US 5708004 A 19980113 US 1995-450605 19950525
US 5708004 A 19980113 US 1995-475089 19950607
US 5610190 A 19970311 US 1995-476009 19950607
US 5610190 A 19970311 US 1995-476009 19950607
US 5872298 A 19990216 US 1995-65213 19950724
US 5872299 A 19990216 US 1997-837373 19970009
US 5872299 A 19990216 US 1997-854133 19970508
US 5872298 A 19990216 US 1997-854133 19970508
US 1991-789644 B2 19911114
US 1991-789644 B2 19911114
US 1991-789646 B2 19911114
US 1992-901069 A3 1991118
US 1992-886556 B1 19920520
US 1992-886556 B1 19920520
US 1992-886556 B1 19920520
US 1992-886556 B1 19920520
US 1993-152649 B3 199301123
US 1993-152649 B3 19930123
  US 5510349
US 5610190
US 5614522
US 5872298
US 5872299
PRIORITY APPLN. INFO.:
   OTHER SOURCE(S):
AB Urea-conta
                         RRINCHR2CH(OH) CH2NR3C (Z) NR4R5 (R = H, acyl; R1, R4 = H, alkyl; R2 =
                         aryl, cycloalkyl, cycloalkylalkyl, aralkyl, R3 = alkyl, alkenyl, hydroxyalkyl, cycloalkyl, cycloalkyl, heterocycloalkyl, heterocycloalkylalkyl, aryl, aralkyl, heteroaralkyl; R5 = alkyl; Z =
  O, S)

were prepd., particularly as HIV inhibitors. Thus,
2,2-dimethyl-3-(4-
pyridyl)propionic acid underwent Curtius rearrangement with
diphenylphosphoryl azide and Et3N in toluene and the product was
 diphenyiphosphoryi azide and Econ in Coldens and Econ product treated with 3(S)-[[N-(2-quinolinylcarbonyl)-L-asparaginyl]amino]-2(R)-hydroxy-4-phenyl-N-[(4-fluorophenyl)methyl]butylamine [2-C9H6NO-Asn-NHCH(CH2Fh)CH(OH)CH2NRCH2C6H4F-p (I, 2-C9H6N = 2-quinolinyl, R = H]
                         afford I [R = [[1,1-dimethyl-2-(4-pyridyl)ethyl]amino]carbonyl].
This

compd. showed HIV protease inhibitory activity as follows: IC50 = 4

nM and
ED50 = 37 nM.

IT 143225-20-1P

RL: RCT (Reactant); SPN (Synthetic preparation), PREP (Preparation)

(preph. and smidation of)

RN 143225-20-1 CAPIUS

CN Cyclopropanearationy/lc acid,
2-[[[3-[[[(1,1-dimethylethyl)amino]carbonyl]{
```

ANSWER 39 OF 139 CAPLUS COPYRIGHT 2002 ACS SSION NUMBER: 1993:603856 CAPLUS MENT NUMBER: 119:203856 ACCESSION NUMBER: DOCUMENT NUMBER: TITLE: Retroviral protease inhibitors Bertenshaw, Deborah Elizabeth, Freskos, John INVENTOR (S): Nicholas Getman, Daniel Paul; Heintz, Robert Martin; Lin. Ko Chung; Rogier, Donald Joseph, Jr.; Talley, John Jeffrey Monsanto Co., USA PCT Int. Appl., 199 pp. CODEN: PIXXD2 Patent PATENT ASSIGNEE (S): SOURCE: DOCUMENT TYPE: English 10 FAMILY ACC. NUM. COUNT: PATENT INFORMATION: PATENT NO. KIND DATE APPLICATION NO. DATE W0 9208688 A1 19920529 W0 1991-US8617 19911118
W: AU, CA, CS, FI, HU, JP, KR, NO, PL, SU, US
RW: AT, BE, BF, BJ, CF, CG, CH, CI, CH, DE, DK, ES, FR, GA, GB, GR, IT, LU, ML, MR, NL, SE, SN, TD, TG 525 AA 19920520 CA 1991-2096525 19911118 531 A1 19920611 AU 1991-90531 19911118 33 A1 19930908 EF 1992-900449 19911118 CA 2096525 AU 9190531 EP 558603 EP 558603
 AU 9190831
 Al 19920611
 AU 1991-90531
 19911118

 EP 558603
 Al 19930908
 EP 1992-900449
 19911118

 EP 558603
 Al 19930908
 EP 1992-900449
 19911118

 EP 558603
 Ri 19980826
 Rr. AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE
 19960911
 EP 1996-107359
 19911118

 EP 731088
 A2 19960911
 EP 1996-107359
 19911118
 19911118
 19911118

 EP 735019
 A3 19970514
 EP 1996-107357
 19911118
 EP 1996-107357
 19911118

 EP 735019
 A2 1996091
 EP 1996-107357
 19911118
 EP 1996-107357
 19911118

 EP 735019
 A2 1996092
 EP 1996-107357
 19911118
 EP 1996-107357
 19911118

 EP 818867
 A2 19971229
 EP 1997-105350
 19911118
 EP 1997-105350
 19911118

 EP 813868
 A2 19971229
 EP 1997-105352
 19911118
 EP 1997-105355
 19911118

 EP 813868
 A2 1991829
 EP 1997-105352
 19911118
 EP 1997-105352
 19911118

 Ri AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE</td

ANSWER 39 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued) 3-methylbutyl)amino]-2-hydroxy-1-(phenylmethyl)propyl]amino]carbonyl]-(9CI) (CA INDEX NAME)

31420-66-3P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation) (prepn. and amidation of, with isoamylamine deriv.)
31420-66-3 CAPLUS
1,2-Cyclopropanedicarboxylic acid, monoethyl ester, (1R,2R)-rel- (9CI) (CA INDEX NAME)

IT 143244-74-0P

RI: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)
(prepn. and sapon. of)
RN 143244-74-0 CAPLUS
CN Cyclopropanecarboxylic acid,
2-[[[3-[[[1,1-dimethylethyl] amino] carbonyl] (

3-methylbutyl) amino]-2-hydroxy-1-(phenylmethyl)propyl]amino]carbonyl]-, ethyl ester (9CI) (CA INDEX NAME)

L7 ANSWER 40 OF 139 CAPLUS COPYRIGHT 2002 ACS ACCESSION NUMBER: 1992:448236 CAPLUS DOCUMENT NUMBER: 117:48236 Rica are also accessed to the company of the c

Ring expansion of tert-butyl

1-vinylcyclopropane-1-

carboxylates to .alpha.-ethylidenebutyrolactones Davies, Huw M. L.; Hu, Bathua Dep. Chem., Wake For. Univ., Winston-Salem, NC,

AUTHOR(S): CORPORATE SOURCE: 27109,

J. Org. Chem. (1992), 57(15), 4309-12 CODEN: JOCEAH; ISSN: 0022-3263 Journal English

DOCUMENT TYPE: LANGUAGE: GI

Thermolysis of tert-Bu 2-alkoxy-1-vinylcyclopropane-1-carboxylates, AB e.g.,

I (R = Et, Bu), resulted in the formation of .alpha.-ethylidenebutyrolactones, e.g. II. Similar transformations could be achieved using boron tribromide as catalyst. Alternatively, reactions induced by VoCl2(OR1) resulted in dimeric or chlorinated .alpha.-ethylidene butyrolactones. The tert-Bu ester is necessary

these transformations as ring expansion involving the ester carbonyl

not obsd. with Me 2-ethoxy-1-vinylcyclopropane-1-carboxylate.

tert-Nu
2-phenyl-1-vinylcyclopropane-1-carboxylate underwent these
transformations
slowly, demonstrating that facile reactions occurred only when strong
donor-acceptor substituents were present.

IT 139958-05-80 142038-40-22 142038-48-09
RE: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)
(prepn. and ring expansion of, butyrolactone from)
RN 139955-05-8 CAPIUS
CN Cyclopropanecarboxylic acid, 2-butoxy-1-ethenyl-, 1,1-dimethylethyl
ster,

cn cyclopisc... ester, trans- (9CI) (CA INDEX NAME)

Relative stereochemistry.

L7 ANSWER 40 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued) L7 ANSWER 40 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

142038-40-2 CAPLUS Cyclopropanecarboxylic acid, 1-ethenyl-2-ethoxy-, 1,1-dimethylethyl trans- (9CI) (CA INDEX NAME)

Relative stereochemistry.

142038-48-0 CAPLUS Cyclopropanecarboxylic acid, 1-ethenyl-2-phenyl-, 1,1-dimethylethyl trans- (9CI) (CA INDEX NAME)

Relative stereochemistry.

IT

RN CN INDEX NAME)

Relative stereochemistry.

L7 ANSWER 41 OF 139 CAPLUS COPYRIGHT 2002 ACS ACCESSION NUMBER: 1992; 256002 CAPLUS DOCUMENT NUMBER: 116:256002

1,2,3-Trisubstituted cyclopropanes as conformationally

restricted peptide isosteres: application to the design and synthesis of novel renin inhibitors Martin, Stephen F.: Austin, Richard E.: Oalmann, Christopher J.: Baker, William R.: Condon, AUTHOR (S):

Stephen L.;

DeLara, Ed; Rosenberg, Saul H.; Spina, Kenneth P.; Stein, Herman H.; et al. Dep. Chem. Biochem., Univ. Texas, Austin, TX,

CORPORATE SOURCE: 78712,

USA J. Med. Chem. (1992), 35(10), 1710-21 CODEN: JMCMAR, ISSN: 0022-2623 SOURCE:

DOCUMENT TYPE: LANGUAGE: GI Journal English

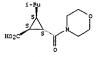
The 1,2,3-trisubstituted cyclopropanes I (R = CO2H; R1 = H, R2 = Et, CH2CHMe2, Ph, PhCH2; R1 = Et, CH2CHMe2, Ph, CH2Ph, R2 = H) are as the first members of a novel class of isosteric replacements for peptide linkages that are more generally represented by the dipeptide mimics

11 and III (R3, R4 = H, alkyl, aryl, hetaryl; W, X = H, OH, O; Y, Z = H, R41.

ANSWER 41 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued) These unique peptide surrogates are specifically designed to lock a section of a peptide backbone in an extended .beta.-strand conformation ormation (...phi.-angle restriction) while simultaneously enforcing one of two specifically defined orientations for the amino acid side chain (.chi.l-angle restriction). Hethods were first developed for the stereoselective, asym. synthesis of the trisubstituted cyclopropanes 1 (R - CO2H) by an efficient approach featuring chiral rhodium complexes catalyze the cyclization of the allylic diazoacetates (2)-RCH:CHCH202CCHN2 to give the optically active lactones IV in up to .gtoreq.94% to give the operation of the lactone ring of IV gave the corresponding morpholine amides I (R = CH2OH). By exploiting tactics that allowed for selective epimerization of one of the two functionalized chains on the cyclopropane nucleus, I (R = CH2OH) were transformed the two series of diastereoisomeric morpholine amides I (R = CO2H). Epimerization of the morpholine amide group followed by Jones oxidn. of
the intermediate alcs. gave acids I (R1 = H). Alternatively, initial oxidn. of the primary alc. groups followed by selective,
base-catalyzed inversion .alpha. to the aldehyde function and then Jones oxidn.
gave the
diastereomeric dicarboxylic acid derivs. I (R2 = H). To evaluate the
efficacy of 1,2,3-trisubstituted cyclopropanes as rigid replacements .beta.-strand secondary structure in pseudopeptide ligands, I (R = CO2H)

were incorporated at the P3 subsite of the potential renin inhibitors I (R = CO-Q) by coupling with the corresponding tripeptide Q-H. A significant no. of these substances inhibited renin at nanomolar concns. On the basis of this preliminary test, 1,2,3-trisubstituted cyclopropanes do appear to
constitute a viable new class of peptide mimics. Since the
stereochem, at
each carbon on the cyclopropane ring may be altered, these novel
replacements may also function as stereochem, probes to establish the
conformation of pseudopeptide ligands bound to their macromol. ts.
42842-79-5P 140926-07-4P 141042-64-0P
141042-65-1P 141042-66-2P 141042-67-3P
141042-68-4P 141042-69-5P 141042-70-8P
141042-78-9P 141042-72-0P 141042-73-1P
141042-77-2P 141042-75-3P 141042-76-4P
141042-77-5P 141042-78-6P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation) (prepn. and amidation of, with tripeptide analog, renin inhibitor

ANSWER 41 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)



141042-66-2 CAPLUS Cyclopropanecarboxylic acid, 2-(4-morpholinylcarbonyl)-3-phenyl-, [1S-(1.alpha.,2.beta.,3.alpha.)]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

141042-67-3 CAPLUS

Cyclopropanecarboxylic acid, 2-ethyl-3-(4-morpholinylcarbonyl)-, [1R-(1.alpha.,2.beta.,3.beta.)]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

141042-68-4 CAPLUS

CN Cyclopropanecarboxylic acid, 2-(2-methylpropyl)-3-(4-morpholinylcarbonyl)-, [1R-(1.slpha,2.beta.,3.beta.)]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L7 ANSWER 41 OF 139 CAPLUS COPYRIGHT 2002 ACS RN 42842-79-5 CAPLUS CN Cyclopropanecarboxylic acid, 2,3-diphenyl-, (1.alpha.,2.beta.,3.beta.)-(9CI) (CA INDEX NAME)

Relative stereochemistry.

140926-07-4 CAPLUS Tatyge-07-4 CAPLUS Cyclopropanecarboxylic acid, morpholinylcarbonyl)-3-(phenylmethyl)-, [15-(1.alpha.,2.beta.,3.alpha.)]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

141042-64-0 CAPLUS Cyclopropanecarboxylic acid, 2-ethyl-3-(4-morpholinylcarbonyl)-, [15-(1.alpha.,2.alpha.,3.beta.)]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

141042-65-1 CAPLUS NN 141042-05-1 CARDOS CN Cyclopropanecarboxylic acid, 2-(2-methylpropyl)-3-(4-morpholinylcarbonyl)-, [15-(1.alpha.,2.alpha.,3.beta.)]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

ANSWER 41 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued) 141042-69-5 CAPLUS Cyclopropanecarboxylic acid, 2-(4-morpholinylcarbonyl)-3-phenyl-, [1R-(1.alpha.,2.beta.,3.beta.)]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

141042-70-8 CAPLUS
Cyclopropanecarboxylic acid,
-morpholinylcarbonyl)-3-(phenylmathyl)-,
[IR-(1.alpha.,2.beta.,3.beta.)]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

141042-71-9 CAPLUS Cyclopropanecarboxylic acid, 2-ethyl-3-(4-morpholinylcarbonyl)-, [IR-(1.alpha.,2.alpha.,3.beta.)]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 141042-72-0 CAPLUS
CN Cyclopropanecarboxylic acid,
2-(2-methylpropyl)-3-(4-morpholinylcarbonyl), [1R-(1.alpha.,2.alpha.,3.beta.)]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

ANSWER 41 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

141042-73-1 CAPLUS
Cyclopropanecarboxylic acid, 2-(4-morpholinylcarbonyl)-3-phenyl-,
[1R-(1.alpha.,2.beta.,3.alpha.)]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

141042-74-2 CAPLUS Cyclopropanecarboxylic acid, -morpholinylcarbonyl)-3-(phenylmethyl)-, [1R-(1.alpha.,2.beta.,3.alpha.)]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

141042-75-3 CAPLUS
Cyclopropanecarboxylic acid, 2-ethyl-3-(4-morpholinylcarbonyl)-,
[15-(1.alpha.,2.beta.,3.beta.)]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L7 ANSWER 41 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

L7 ANSWER 41 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)
RN 141042-76-4 CAPLUS
CN Cyclopropanecarboxylic acid,
2-(2-methylpropyl)-3-(4-morpholinylcarbonyl), [1S-(1.alpha.,2.beta.,3.beta.)]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

141042-77-5 CAPLUS Cyclopropanecarboxylic acid, 2-(4-morpholinylcarbonyl)-3-phenyl-, [15-(1.alpha, 2.beta., 3.beta.)]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 141042-78-6 CAPLUS
CN Cyclopropanecarboxylic acid,
2-(4-mcrpholinylcarboxyl)-3-(phenylmethyl)-,
[1S-(1.alpha.,2.beta.,3.beta.)]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

135588-56-6P
RL: SPN (Synthetic preparation), PREP (Preparation)
(prepn. of)
135588-56-6 CAPLUS
Cyclopropanecarboxylic acid, 2-(4-morpholinylcarbonyl)-3-phenyl-,
5-methyl-2-(1-methylethyl)cyclohexyl ester, [1R[1.alpha.(1R*,2R*,3S*),2.beta.,5.alpha.]]- (SCI) (CA INDEX NAME)

Absolute stereochemistry.

L7 ANSWER 42 OF 139 CAPLUS COPYRIGHT 2002 ACS ACCESSION NUMBER: 1992; 255709 CAPLUS DOCUMENT NUMBER: 1161:255709 A povel to a line of the company of the com

116:255709
A novel type of chiral diphosphine ligand, trans-2,3-bis(diphenylphosphino)-1-methyl-1-cyclopropanearboxylic acid and asymmetric allylic alkylation by the use of its palladium complex Okada, Yoshiharu, Minami, Toru; Yamamoto, Tsutomu; Ichikawa, Junji
Dep. Appl. Chem., Kyushu Inst. Technol.,

AUTHOR (S):

CORPORATE SOURCE: Kitakyushu,

Ritakyushu,

804, Japan

SOURCE: Chem. Lett. (1992), (4), 547-50

CODEN: CMIRAG; ISSN: 0366-7022

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(s): CASREACT 116:255709

AB Optically active trans-2,3-bis (diphenylphosphino)-1-methyl-1
cyclopropanecarboxylic acid was synthesized from trans-1,2bis (diphenylphosphinyl) ethene via resoln. of the racemic diphosphine
oxide. Asym. allylic alkylation of 2-cyclohexenyl acetate with
1-menthyl
sodiodiethylphosphonoacetate was achieved in good optical yields by
the

use of its palladium complex.

141660-66-4P
RL: RCT (Reactant), SPN (Synthetic preparation); PREP (Preparation) (prepn. and hydrolysis of)

141660-66-4 CAPLUS
Butanedioic acid, 2,3-bis(benzyloxy)-, [S-(R*,R*)]-, compd. with (1.alpha.,2.alpha.,3.beta.)-(-)-1,1-dimethylethyl 2,3-bis(diphenylphosphinyl)-1-methylcyclopropanecarboxylate (1:1) (SCI)

INDEX NAME)

CM 1

Rotation (-). Absolute stereochemistry unknown.

L7 ANSWER 42 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued) CRN 17026-42-5 CRN 17026-42-5 CMF C18 H14 O8

Absolute stereochemistry. Rotation (+).

141610-77-7P 141610-78-8P
RL: RCT (Reactant), SPN (Synthetic preparation), PREP (Preparation) (prepn. and redn. of)
141610-77-7 CAPLUS
Cyclopropanecarboxylic acid, 2,3-bis(diphenylphosphinyl)-1-methyl-,
1,1-dimethylethyl ester, (1.alpha.,2.alpha.,3.beta.)-(-)- (9CI) (CA

Rotation (-). Absolute stereochemistry unknown.

141610-78-8 CAPLUS

Cyclopropanecarboxylic acid, 2,3-bis(diphenylphosphinyl)-1-methyl-, 1,1-dimethylethyl ester, (1.alpha.,2.alpha.,3.beta.)-(+)- (9CI) (CA INDEX NAME)

Rotation (+). Absolute stereochemistry unknown.

ANSWER 42 OF 139 CAPLUS COPYRIGHT 2002 ACS NAME) (Continued)

Rotation (+). Absolute stereochemistry unknown.

ΙT 141540-19-4P

RL: SPN (Synthetic preparation), PREP (Preparation) (preph. of and catalytic activity with palladium acetate, for

allylic alkylation)
141540-19-4 CAPLUS
Cyclopropanecarboxylic acid, 2,3-bis(diphenylphosphino)-1-methyl-,
(1.alpha.,2.alpha.,3.beta.)-(-)- (9CI) (CA INDEX NAME)

Rotation (-). Absolute stereochemistry unknown.

17 141610-80-2P

RL: SPN (Synthetic preparation); PREP (Preparation) (prepn. of and catalytic activity with palladium, for asym.

allvlic

alkylation)
141610-80-2 CAPLUS
Cyclopropanecarboxylic acid, 2,3-bis(diphenylphosphino)-1-methyl-,
(1.alpha.,2.alpha.,3.beta.)-(+)- (9CI) (CA INDEX NAME)

Rotation (+). Absolute stereochemistry unknown.

L7 ANSWER 42 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

ΙT 141540-17-2P

141540-17-2P
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. and resoln. of)
141540-17-2 CAPLUS
Cyclopropanecarboxylic acid, 2,3-bis(diphenylphosphinyl)-1-methyl-,
1,1-dimethylethyl ester, (1.alpha.,2.alpha.,3.beta.)- (9C1) (CA INDEX
NAME)

Relative stereochemistry.

ΙT 141540-18-3P 141610-79-9P

RELECT (Reactant) SPN (Synthetic preparation); PREP (Preparation) (prepn. and sapon. of)
141540-18-3 CAPLUS
Cyclopropanecarboxylic acid, 2,3-bis(diphenylphosphino)-1-methyl-,
1,1-dimethylethyl ester, (1.alpha.,2.alpha.,3.beta.)-(-)- (9CI) (CiX INDEX

NAME)

Rotation (-). Absolute stereochemistry unknown.

141610-79-9 CAPLUS

Cyclopropanecarboxylic acid, 2,3-bis(diphenylphosphino)-1-methyl-,
1,1-dimethylethyl ester, (1.alpha.,2.alpha.,3.beta.)-(+)- (9CI) (CA

ANSWER 43 OF 139 CAPLUS COPYRIGHT 2002 ACS ACCESSION NUMBER:

1992:235109 CAPLUS 116:235109

DOCUMENT NUMBER: TITLE: Bis(oxazolines) as ligands for self-organizing

chiral coordination polymers. Structure of copper(I)

cataysts for enantioselective cyclopropanation of olefins Evans, David A.; Woerpel, Keith A.; Scott,

AUTHOR (S):

Michael J. CORPORATE SOURCE: Dep. Chem., Harvard Univ., Cambridge, MA, 02138,

USA SOURCE: Angew. Chem. (1992), 104(4), 439-41 (See also Angew.

Chem., Int. Ed. Engl., 1992, 31(4), 430-2) CODEN: ANCEAD; ISSN: 0044-8249

DOCUMENT TYPE: LANGUAGE: GI Journal German

The crystal structure of the complexation product of Cu triflate with bis(oxazoline) I was studied, and the soln. structure of the complex

examd. by spectral methods. The Cu-I complex exists as a coordination polymer and can catalyze the enantioselective cyclopropanation of styrene

ene
by N2CHCO2Et.
34702-96-0P 34702-97-1P 34716-60-4P
REL RCT (Reactant): SPN (Synthetic preparation); PREP (Preparation)
(prepn. and sapon. of)
34702-96-0 CAPLUS
Cyclopropanecarboxylic acid, 2-phenyl-, ethyl ester, (15,28)- (9CI)

INDEX NAME)

Absolute stereochemistry. Rotation (+).

34702-97-1 CAPLUS Cyclopropanecarboxylic acid, 2-phenyl-, ethyl ester, (1R,2S)- (9CI)

L7 ANSWER 43 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued) INDEX NAME)

Absolute stereochemistry. Rotation (-).

34716-60-4 CAPLUS Cyclopropanecarboxylic acid, 2-phenyl-, ethyl ester, (1R,2R)- (9CI) INDEX NAME)

Absolute stereochemistry. Rotation (-).

Absolute stereochemistry. Rotation (-).

23020-15-7 CAPLUS Cyclopropanecarboxylic acid, 2-phenyl-, (15,25)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

RN 48126-51-8 CAPLUS CN Cyclopropanecarboxylic acid, 2-phenyl-, (1R,25)- (9CI) (CA INDEX NAME)

L7 ANSWER 44 OF 139 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1992:214743 CAPLUS
DOCUMENT NUMBER: 116:214743
TITLE: Process for the preparation of pyrethroid

from phenoxybenzaldehyde and vinyldimethylcyclopropanecarbonyl chloride derivatives. Botar, Sandor: Szekely, Istvan: Bertok, Bela: INVENTOR (S) :

Antal: Hidasi, Gyorgy: Zoltan, Sandor: Hajimichael.

Janis: Rapi, Andras: Lindwurm, Ferenc: et al. Chinoin Gyogyszer es Vegyeszeti Termekek Gyara PATENT ASSIGNEE(S): Rt.,

SOURCE:

Hung. PCT Int. Appl., 22 pp. CODEN: PIXXD2 Patent

DOCUMENT TYPE: LANGUAGE: English

FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9202492	A1	19920220	WO 1990-HU53	19900727
W: GB				
GB 2251621	A1	19920715	GB 1992-5920	19920318
GB 2251621	B2	19940406		
PRIORITY APPLN. INFO.:		WO	1990-HU53	19900727
OTHER SOURCE(S):	MA	RPAT 116:214743		

AB The invention relates to the prepn. of pyrethroid derivs. of high purity suitable for controlled crystn. Pyrethroids of general formula I (A

Suitable to constant of the control of the control

L7 ANSWER 43 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued) Absolute stereochemistry.

ANSWER 44 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued) prepd. from 3-PhO-4-YC6H3CHO by reaction of alkali cyanide in water

prepd. from 3-PhO-4-YCGH3CHO by reaction of alkali cyanide in water 19 an amine as Catalyst, whereby benzaldehyde is added to 7-94 aq. alkali cyanide in the presence of 0.15-0.25 mol equivs. of amine. The cyanohydrin formed in the reaction mixt. is acylated in statu nascens parallel to the formation of cyanohydrin with an acid chloride and the cypermethrin emulsion obtained is extd. with an apolar solvent. 59042-49-8, cis-3-(2,2-Dichlorosthenyl)-2,2-dimethylcylopropanecarboxylic acid 59042-50-1 63538-10-3 63597-73-9
RI: RCT (Reactant) (chlorination and acylation by, of phenoxybenzaldehyde derivs.) 59042-49-8 CAPLUS
Cyclopropanecarboxylic acid, 3-(2,2-dichlorosthenyl)-2,2-dimethyl-, (18,3R)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

59042-50-1 CAPLUS

Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-, (1R,35)-rel- (9CI) (CA INDEX NAME)

63538-10-3 CAPLUS Cyclopropanecarboxylic acid, 3-{2,2-dibromoethenyl}-2,2-dimethyl-,(IR,3S)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

63597-73-9 CAPLUS Cyclopropanecarboxylic acid, 3-(2,2-dibromoethenyl)-2,2-dimethyl-, (1R,3R)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

64312-65-8P 64312-66-9P 64312-68-1P
64312-69-2P 65731-83-1P 65731-84-2P
65732-07-2P 66841-24-5P 72204-43-P
72204-44-5P 83860-31-5P 83860-32-6P
141041-32-9P 141041-33-0P 141041-34-1P
141041-33-8P 141041-33-0P 141041-34-1P
RL: SPN (Synthetic preparation), PREP (Preparation)
(high-yield one-pot prepn. of)
64312-65-8 CAPUS
Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2-methyl-1-propenyl)-,
(S)-cyano(3-phenoxyphenyl)methyl ester, (1R,3R)- (9CI) (CA INDEX ΙT

Absolute stereochemistry.

64312-66-9 CAPLUS
Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2-methyl-1-propenyl)-,
cyano(3-phenoxyphenyl)methyl ester, [1R-[1.alpha.[5*),3.alpha.]]-

(9CI) (CA INDEX NAME)

Absolute stereochemistry.

64312-68-1 CAPLUS
Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2-methyl-1-propenyl)-,
cyano(3-phenoxyphenyl)methyl ester, [IR-[1.alpha.(R*),3.beta.]]-(9CI)

(CA INDEX NAME)

Absolute stereochemistry.

L7 ANSWER 44 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

65732-07-2 CAPLUS Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-, (S)-cyano(3-phenoxyphenyl)methyl ester, (1R,3S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

66841-24-5 CAPLUS
Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-,
(R)-cyano(3-phenoxyphenyl)methyl ester, (1R,3S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

72204-43-4 CAPLUS Cyclopropanezarboxylic acid, 3-{2,2-dichloroethenyl}-2,2-dimethyl-(S)-cysno(3-phenoxyphenyl)methyl ester, (15,35)- (9CI) (CA INDEX

Absolute stereochemistry.

ANSWER 44 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

64312-69-2 CAPLUS

be312-b9-2 CAPLUS
Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2-methyl-1-propenyl)cyano(3-phenoxyphenyl)methyl ester, [1R-{1.alpha.(R*),3.alpha.]]-(9CI)

(CA INDEX NAME)

Absolute stereochemistry.

65731-83-1 CAPLUS
Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-,
(R)-cyano(3-phenoxyphenyl)methyl ester, (1R,3R)- (9CI) (CA INDEX

Absolute stereochemistry.

65731-84-2 CAPLUS Cyclopropancarboxylic acid, 3-(2,2-dichlorosthenyl)-2,2-dimethyl-, (3)-cyano(3-phenoxyphenyl)methyl ester, (1R,3R)- (9CI) (CA INDEX

Absolute stereochemistry. Rotation (+).

ANSWER 44 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

72204-44-5 CAPLUS Cycloprostylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-, (8)-cyano(3-phenoxyphenyl)methyl ester, (15,35)- (9CI) (CA INDEX

Absolute stereochemistry.

83860-31-5 CAPLUS Cyclopropancathoylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-, (3)-cyano(3-phenoxyphenyl)methyl ester, (15,3R)- (9CI) (CA INDEX

Absolute stereochemistry.

83860-32-6 CAPLUS
Cyclopropanecarboxylic acid, 3-{2,2-dichloroethenyl}-2,2-dimethyl-,
(R)-cyano(3-phenoxyphenyl)methyl ester, (15,3R)- (9CI) (CA INDEX

Absolute stereochemistry.

141041-32-9 CAPLUS
Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2-methyl-1-propenyl)-,
cyano(3-phenoxyphenyl)methyl ester, [15-[1.alpha.(5*),3.beta.]]-

(CA INDEX NAME)

Absolute stereochemistry.

141041-33-0 CAPLUS Cyclopropanecatoxylic acid, 2,2-dimethyl-3-(2-methyl-1-propenyl)-, (5)-cyano(3-phenoxyphenyl)methyl ester, (15,35)- (9CI) (CA INDEX

141041-34-1 CAPLUS
Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2-methyl-1-propenyl)-,
cyano(3-phenoxyphenyl)methyl ester, [15-{1.alpha.(R*),3.alpha.]]-

(9CI) (CA INDEX NAME)

Absolute stereochemistry.

L7 ANSWER 45 OF 139 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1992:83242 CAPLUS
DOCUMENT NUMBER: 116:83242
.alpha-Hydroxy esters as inexpensive chiral auxiliaries in rhodium(II)-catalyzed

cyclopropanations

with vinyldiazomethanes
Davies, Huw M. L.; Cantrell, William R., Jr.
Dep. Chem., Wake Forest Univ., Winston-Salem, NC,
27109, USA
Tetrahedron Lett. (1991), 32(45), 6509-12
CODEN: TELEAY; ISSN: 0040-4039
Journal
English
CASREACT 116:83242 AUTHOR(S): CORPORATE SOURCE:

SOURCE:

DOCUMENT TYPE: LANGUAGE: OTHER SOURCE(S): GI

AB High levels of asym. induction were achieved in rhodium(II)-catalyzed cyclopropanations with chiral vinyldiazomethanes.

(R)-(-)-Rantolactone is
the most effective chiral auxiliary, but other .alpha.-hydroxy

rs also give reasonable levels of diastereoselectivity. Thus, reaction of trans-PhCH:CHC(N2)COR (R = chiral auxiliary) with styrene in the

presence of Rh2L4 (L = O2CMe) in refluxing CH2Cl2 afforded cyclopropanes I and II

and II

(914 yield, 894 de).

IT 138770-18-0P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)

(prepn. and Curtius rearrangement of)

RN 138770-18-0 CAPLUS

CN 1,1-Cyclopropanedicarboxylic acid, 2-phenyl-,

mono(tetrahydro-4,4-dimethyl2-oxo-3-furanyl) ester, [15-[1.alpha.(S*),2.beta.]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L7 ANSWER 44 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

141041-35-2 CAPLUS
Cyclopropanerarboxylic acid, 2,2-dimethyl-3-(2-methyl-1-propenyl)-,cyano(2-phenoxyphenyl)methyl ester, [15-[1.alpha.(5*),3.alpha.]]-

(9CI) (CA INDEX NAME)

Absolute stereochemistry.

L7 ANSWER 45 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

138770-14-6P 138812-36-9P RL: SPN (Synthetic preparation); PREP (Preparation) (prepn. and conversion of, to Me ester) 138770-14-6 CAPLUS

Cyclopropanecarboxylic acid, 2-phenyl-1-(2-phenylethenyl)-, 2-methoxy-1-methyl-2-oxoethyl ester, [1R-[1.alpha.(5*),2.beta.]]-

(CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry unknown.

138812-36-9 CAPLUS
Cyclopropanecarboxylic acid, 2-phenyl-1-(2-phenylethenyl)-,
2-methoxy-1-methyl-2-oxoethyl ester, [15-[1.alpha.(R*),2.beta.]]-

(CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry unknown.

138770-15-7P 138770-17-9P 138812-37-0P RL: SPN (Synthetic preparation), PREP (Preparation) (prepn. of)

L7 ANSWER 45 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)
RN 138770-15-7 CAPLUS
CN Benzeneacetic acid,
.alpha.-[[[2-phenyl-1-(2-phenylethenyl)cyclopropyl]car
bonylloxyl-, methyl ester (SCI) (CA INDEX NAME)

138770-17-9 CAPLUS

Cyclopropanecarboxylic acid, 2-phenyl-1-(2-phenylethenyl)-, 5-methyl-2-(1-methylethyl)cyclohexyl ester (9CI) (CA INDEX NAME)

138812-37-0 CAPLUS Cyclopropanecarboxylic acid, 2-phenyl-1-(2-phenylethenyl)-, methyl

(1R-trans) - (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry unknown.

L7 ANSWER 46 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued) are prepd. I may also be used to treat erosive gastritis, inflammatory bowel disease, prevention of SRA-release (no data). To a suspension

{(7-chloroquinolin-2-yl)methyl]triphenylphosphonium bromide in THF

added BuLi, the reaction mixt. was stirred at -78.degree. and Me 2-[3-[2-(methoxycarbonyl)ethylthio]-3-(3-formylphenyl)propyl]benzoate [prepn. from 3-(BrCH2)CGH4CN given] added, the mixt. warmed to room

temp.
to give I (R1 = 7-C1; Y = CH:CH; A = HO2C(CH2)25; B =
2-(HO2C)C6H4CH2CH2)
[II] as the di-He ester, which in THF and MeOH was sapond. to give
II.2Na

salt. A capsule, injectable suspension and tablet formulations

Salt. A Capsule, injectable suspension and tablet formulations comprising I are given. Pharmaceutical compn. of I may comprise an addnl. active

ve
ingredient such as nonsteroidal antiinflammatory drug, peripheral
analgesic, cyclooxygenase inhibitor, etc.
133772-30-2P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)
(prepn. and reaction of, on prepn. of leukotriene antagonists)
133772-30-2C CAPLUS
Cyclopropanecarboxylic acid, 1-(mercaptomethyl)-, ethyl ester (9CI)

INDEX NAME)

133768-68-0P 133768-70-4P 133771-77-4P 133771-79-6P

RL: BAC (Biological activity or effector, except adverse); SPN (Synthetic

thetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (prepn. of, as leukotriene antagonist) 133768-68-0 CAPLUS

Cyclopropanecarboxylic acid, 1-[[[1-[3-[(7-chloro-2-

quinoliny1}methoxy]pheny1]-3-[2-[(dimethylamino)carbony1]pheny1]propy1]thi
o]methy1]- (9CI) (CA INDEX NAME)

L7 ANSWER 46 OF 139 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1991:656016 CAPLUS
100CURENT NUMBER: 115:256016
ITILE: 115:256016
Preparation of diarylstyrylquinoline diacids as leukotriene antagonists
(Robert N. Gauthier, Jacques Yves; Zamboni, Robert N.; Gauthier, Jacques Yves; Zamboni, Robert N.; Gauthier, Jacques Yves; Zamboni, Robert N.; Gauthier, Jacques Yves; Zamboni, Robert Source: Except Source: Exc

DOCUMENT TYPE: LANGUAGE:

FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

	PAT	ENT	NO.		KI	ND	DATE				API	LIC	CAT	ON	NC).	DATE		
	ΕP	3998	118		A:	ı	1990	1128			EΡ	199	90-	305	640)	1990	052	3
	EP	3998	18		В:	ı	1995	0816											
		R:	AT,	BE,	CH,	DE,	DK,	ES,	FR,	GB	, 0	R,	IT.	, L	I,	LU,	NL,	SE	
	US	5104	1882		A		1992	0414			US	199	90-	527	236	5	1990	052	2
	CA	2017	1376		A.	A.	1990	1124			CA	199	90-	201	737	16	1990	052	3
	NO	9002	2301		A		1990	1126			NO	199	0-:	230	1		1990	052	3
	ΑU	9055	811		A:	l	1990	1213			ΑU	199	-00	558	11		1990	052	3
	ZA	9003	983		A		1991	0327			ZA	199	0-	398	3		1990	052	3
	JP	0307	2459		A:	2	1991	0327			JΡ	199	-00	132	754		1990	052	4
	JP	0710	3107		В	1	1995	1108											
	US	5204	1358		Α		1993	0420			US	199	92-	818	598		1992	010	9
PRIOR	ITY	API	LN.	INFO.	:				τ	ıs	198	9-3	356	478			1989	052	4
									τ	IS	198	7-:	125	050			1987	112	5
									ι	IS	198	8-2	275	160			1988	112	2
									ι	IS	199	0-5	27	236			1990	052	2

US 1990-527236 OTHER SOURCE(S): MARPAT 115:256016

AB Title compds. I [R1 = 7-C1, 7-MeO, 6-F3C, 7-F3C, 6-MeSO2, H, 6,7-C12; Y =

CH:CH, CH2CH2, CH2O, CHMeCH2; A = HO2C(CH2)25, Me2NCO(CH2)25, 3-(HO2C)C6H4S, Me3CNHCO(CH2)2S, 4-carboxy-2-pyridyl, [(1-adamantylamino)carbonylethyl]thio, 1-tetrazol-5-ylmethylthio, etc.; B

2-(HO2C)C6H4CH2CH2, 3-(HO2C)C6H4, 5-carboxy-2-thiophenyl, HO2CCH2CHMe(CH2)2, 6-carboxy-2-pyridyl, 2-(Me3CNHCO)C6H4S, 3-[(1-tetrazol-5-yl)methyl)phenyl, etc.] and their salts, useful as inhibitors of leukotriene biosynthesis, antiasthmatic, antiallergic, antiinflammatory, and cytoprotective agents (no data, assays described),

ANSWER 46 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

133768-70-4 CAPLUS Cyclopropanecarboxylic acid, 1-[[[1-[3-[2-(7-chloro-2-

quinolinyl) ethyl] phenyl] -3-[2-[(dimethylamino) carbonyl] phenyl] propyl] thio]
methyl] - (9CI) (CA INDEX NAME)

133771-77-4 CAPLUS
Cyclopropanecarboxylic acid, 1-[[[1-[3-[{7-chloro-2-

quinoliny1)methoxy]pheny1]-3-[2-[(dimethylamino)carbonyl]phenyl]propyl]thi
o]methyl]-, sodium salt (9CI) (CA INDEX NAME)

L7 ANSWER 46 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

133771-79-6 CAPLUS Cyclopropanecarboxylic acid, 1-[[[1-[3-[2-(7-chloro-2-

quinolinyl)ethyl]phenyl]-3-{2-{(dimethylamino)carbonyl]phenyl]propyl]thio]
 methyl]-, sodium salt (9CI) (CA INDEX NAME)

Na

L7 ANSWER 47 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

136598-13-5 CAPLUS To The Cart Discrete Company of the Company of

Absolute stereochemistry. Double bond geometry as shown.

L7 ANSWER 47 OF 139 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1991:583446 CAPLUS
105:1893446
TITLE: The stereochemistry of organometallic compounds.
XXXVII Regio- and stereocontrol in the rhodium-catalyzed hydroformylation of some alkenylphosphines
Hee: Jackson, W. Roy; Perlmutter, Patrick; Suh, Guem

AUTHOR(5): Hee;

Hee;

Tasdelen, E. Elizabeth
Dep. Chem., Monash Univ., Clayton, 3168, Australia
SOURCE:
Aust. J. Chem. (1991), 44(7), 951-66
CODEN: AVCRAS; ISSN: 0004-9425

DOCUMENT TYPE:
DOLINACTION:
CHARGUAGE:
English
OTHER SOURCE(S):
CASREACT 115:183446
AB Good to excellent regiocontrol can be obtained for the internal product of rhodium-catalyzed hydroformylation of a range of alkenylphosphines.

hydroformylation of CH2:CHCH2CH2PPh2 in the presence of tetrakis(acetato)dirhodium gave 100% HOCH2CHMeCH2CH2PPh2. Excellent stereo- as well as regiocontrol can also be obtained for reactions of

3- (2-

cyclic alkenylphosphines.
87725-85-7
RL: RCT (Reactant)
(esterification by, of diphenylphosphorylmethylbutanol)
87725-85-7 CAPLUS
Cyclopropanecarboxylic acid,
2-chloro-3,3,3-trifluoro-1-propenyl)-2,2dimethyl-, [1R-[1.slpha.,3.slpha.(E)]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.

IT 136492-51-8P 136598-13-5P
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)
RN 136492-51-8 CAPIUS
CN Cyclopropanecarboxylic acid,
3-(2-chloro-3,3,3-trifluoro-1-propenyl)-2,2dimbyl-, 4-(diphenylphosphinyl)-2-methylbutyl ester,
[1R-[1.alpha.(R*),3.alpha.(E)]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Double bond geometry as shown.

L7 ANSWER 48 OF 139 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1991:514036 CAPLUS
DOCUMENT NUMBER: 115:114036
Hotal catalyzed carbonylation of gemdibromocyclopropanes
AUTHOR(S): Grubbin, Vladimir V. Alper, Howard
CORPORATE SOURCE: Ottowa-Carleton Chem. Inst., Univ. Ottawa, AUTHOR(S): CORPORATE SOURCE: Ottawa, ON,

SOURCE:

KIN 6N5, Can. Tetrahedron Lett. (1991), 32(28), 3349-52 CODEN: TELEAY; ISSN: 0040-4039 Journal English CASTRACT 115:114036

DOCUMENT TYPE: LANGUAGE: OTHER SOURCE(S): GI

The first examples of the catalytic carbonylation of gen-dibromocyclopropanes is described, using cobalt and nickel salts as catalysts under phase transfer conditions. Thus, 1,1-dibromo-2-phenylcyclopropane (I) in PhMe was added to a mixt. of

KOH, CoCl2, Ni(CN)2.4H2O, KCN, and PEG-400 in PhMe that had been pretreated with CO-H2 and the mixt. heated under CO-H2 to give 72% a 1:1

ΙT

mixt, of the cis- and trans-phenylcyclopropanecarboxylic acids II. 5365-17-3
RL: RCT (Reactant)
(cobalt-nickel-catalyzed phase transfer carbonylation of) 5365-17-3 CAPLUS
Cyclopropanecarboxylic acid, 2,2-dibromo- (6CI, 7CI, 8CI, 9CI) (CA INDEX NAME)

ΙT

939-89-9P 939-90-2P 5682-61-1P 5861-31-4P 7150-12-1P RL: SPN (Synthetic preparation); PREP (Preparation)

Cyclopropanecarboxylic acid, 2-phenyl-, (lR,2S)-rel- (9CI) (CA INDEX NAME)

939-90-2 CAPLUS Cyclopropanecarboxylic acid, 2-phenyl-, (1R,2R)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

RN 5682-61-1 CAPLUS
CN Cyclopropanecarboxylic acid, 2-phenyl-, methyl ester, (1R,2S)-rel(9C1) (CA INDEX NAME)

Relative stereochemistry.

5861-31-4 CAPLUS Cyclopropanecarboxylic acid, 2-phenyl-, methyl ester, (1R,2R)-rel-(9CI) (CA INDEX NAME)

Relative stereochemistry.

7150-12-1 CAPLUS Cyclopropanecarboxylic acid, 2,2-diphenyl- (6CI, 7CI, 8CI, 9CI) (CA NAME)

L7 ANSWER 49 OF 139
ACCESSION NUMBER:
DOCUMENT NUMBER:
115150231
AUTHOR(S):
AUTHOR(S):
CORPORATE SOURCE:
LANGUAGE:
CORPORATE SOURCE:
SOURCE:
SOURCE:
CORPORATE SOURCE:
SOURCE:
SOURCE:
SOURCE:
CORPORATE SOURCE:
SOURCE:
SOURCE:
CORPORATE SOURCE:
SOURCE:
SOURCE:
CORPORATE SOURCE:
SOURCE:
SOURCE:
SOURCE:
SOURCE:
CORPORATE SOURCE:
SOURCE:
SOURCE:
SOURCE:
SOURCE:
SOURCE:
CORPORATE SOURCE:
SOURCE:
SOURCE:
SOURCE:
SOURCE:
SOURCE:
SOURCE:
SOURCE:
CORPORATE SOURCE:
SOU

DOCUMENT TYPE: LANGUAGE: OTHER SOURCE(S): GI

AB To det. what conformations of L-glutamate (I) activate different receptors
in the mammalian central nervous system, four disstereomeric
L-2-(carboxycyclopropyl)glycines L-II, which are conformationally
constrained analogs of the extended and folded conformers of I, were
synthesized and subjected to neurophysiol. assay. Compds. L-II were
efficiently synthesized from chiral amino acids. Cyclopropanation of
(S)-H2C:CHCH(NHBoc)CH2OSiMe2Me3 (III) Boc - Me3CO2C) gave
intermediates

for the synthesis of all four diastereomers. Stereoselective cyclopropanation of both the .alpha.,.beta.-unsatd. .gamma.-lactam IV and

nd the .delta.-lactone V gave precursors of (25,1'5,2'R)-II and (25,1'R,2'S)-II, resp. Neurophysiol. assays of L-II performed with

newborn rat spinal cord demonstrated that the compds. induced a variety of

ety or depolarizing effects. The results of the assays strongly suggested that

the N-methyl-D-aspartic acid (NMDA) receptor is activated by the

ed conformer of I and that the extended conformer of I activates the metabotropic receptor. The four analogous D-2- (carboxycyclopropyl)glycines D-II, prepd. from (R)-III, were NMDA agonists. 17837-93-9F 17857-94-0P 17857-95-1P 17857-95-2P 125412-10-4P 125412-11-5P

L7 ANSWER 48 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

RI: PRF (Properties): SPN (Synthetic preparation): PREP (Preparation) (prepn. and activity of, toward glutamate neurotransmitter receptors)
RN 117857-93-9 CAPLUS
CN Cyclopropaneacetic acid, .alpha.-amino-2-carboxy-, (.alpha.S,1S,2S)-(9CI) (CA INDEX NAME)

(CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

117857-94-0 CAPLUS Cyclopropaneacetic acid, .alpha.-amino-2-carboxy-, (.alpha.S,1R,2R)-(CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

RN CN (9CI) 117857-95-1 CAPLUS Cyclopropaneacetic acid, .alpha.-amino-2-carboxy-, (.alpha.S,1S,2R)-(CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

117857-96-2 CAPLUS Cyclopropaneacetic acid, .alpha.-amino-2-carboxy-, (.alpha.S,lR,2S)-(9CI) (CA INDEX NAME)

Absolute stereochemistry

L7 ANSWER 49 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

RN 125412-10-4 CAPLUS
CN Cyclopropaneacetic acid, .alpha.-amino-2-carboxy-, (.alpha.R,1R,2R)(9CI)
(CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

RN 125412-11-5 CAPLUS
CN Cyclopropaneacetic acid, .alpha.-amino-2-carboxy-, (.alpha.R,1S,2S)(9CI)
(CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

RN 125412-12-6 CAPLUS CN Cyclopropaneacetic acid, .alpha.-amino-2-carboxy-, (.alpha.R,1R,2S)-(9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 125412-13-7 CAPLUS
CN Cyclopropaneacetic acid, .alpha.-amino-2-carboxy-, (.alpha.R,1S,2R)(9CI)
(CA INDEX NAME)

L7 ANSWER 49 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)
CN Cyclopropanecarboxylic acid,
2-[1-[[(1,1-dimethylethoxy)carbonyl]amino]-2[[(1,1-dimethylethyl)dimethylsilyl]oxy]ethyl]-, ethyl ester,
[1S-[1.alpha.,2.beta.(R*)]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 124151-72-0 CAPLUS
CN Cyclopropanecarboxylic acid,
2-[1-[[(1,1-dimethylethoxy)carbonyl]amino]-2[[(1,1-dimethylethyl)dimethylsilyl]oxy]ethyl]-, ethyl ester,
[lR-[1.alpha.,2.beta.(S*)]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

$$\begin{array}{c|c} \text{EtO} & \overset{R}{\underset{O}{\underset{}}} & \overset{H}{\underset{}} & \overset{\text{Me}}{\underset{}} & \overset{\text{Me}}{\underset{}}$$

RN 134419-12-8 CAPLUS
CN Cyclopropanearboxylic scid,
Cl-1[[(1,1-dimethylethoxy)carbonyl]amino]-2[[(1,1-dimethylethyl)dimethylsilylloxylethyl]-, methyl ester,
[1S-[1.alpha.,2.beta.(R)]]]- (CI NDEX NAME)

Absolute stereochemistry.

L7 ANSWER 49 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued) Absolute stereochemistry.

IT 117747-68-9F 117857-90-6F
RL: SFN (Synthetic preparation); PREP (Preparation)
(prepn. and sequential Jones oxidn. and deblocking of)
RN 117747-68-9 CAPLUS
CN Cyclopropanecarboxylic acid,
2-[1-[[[1,1-dimethylethoxy)carbonyl]amino]-2hydroxyethyl]-, ethyl ester, [1S-[1.alpha.,2.beta.(R*)]]- (9CI) (CA
INDEX
NAME)

Absolute stereochemistry.

RN 117857-90-6 CAPLUS
CN Cyclopropanecarboxylic acid,
2-[1-[([1,1-dimethylethoxy)carbonyl]amino]-2hydroxyethyl]-, ethyl ester, [[R-[1.alpha.,2.beta.(S*)]]- (9CI) (CA
INDEX
NAME)

Absolute stereochemistry.

IT 124085-73-0P 124151-72-0P 134419-12-8P 134419-15-1P 134419-16-2P 134525-19-2P 134525-22-7P 134525-23-8P 134525-27-2P RL: SPN (Synthetic preparation); PREP (Preparation) (prepn. of)
RN 124085-73-0 CAPLUS

L7 ANSWER 49 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)
RN 134419-15-1 CAPLUS
CN 3-Oxazolidinecarboxylic acid, 4-[2-(methoxycarboxyl)cyclopropyl]-2,2dimethyl-, 1,1-dimethylethyl ester, [1S-[1.alpha.(R*),2.beta.]]- (9CI)
(CA INDEX NAME)

Absolute stereochemistry.

RN 134419-16-2 CAPLUS
CN 3-Oxazolidinecarboxylic acid, 4-[2-(ethoxycarbonyl)cyclopropyl]-2,2-dimethyl-, 1,1-dimethylethyl ester, [1S-[1.alpha.(R*),2.beta.]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 134525-19-2 CAPLUS
CN Cyclopropanecarboxylic acid,
2-[1-[[(1,1-dimethylethoxy)carbonyl]amino]-2[[(1,1-dimethylethyl)dimethylsilyl]oxy]ethyl]-, methyl ester,
[[1.alpha.,2.beta.(5*)]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 134525-22-7 CAPIUS
CN 3-0xazolidinecarboxylic acid, 4-[2-(methoxycarbonyl)cyclopropyl]-2,2dimethyl-, 1,1-dimethylethyl ester, [1R-[1.alpha.(S*),2.beta.]]- (9CI)
(CA INDEX NAME)

L7 ANSWER 49 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued) Absolute stereochemistry.

134525-23-8 CAPLUS

3-Oxazolidinecarboxylic acid, 4-[2-[ethoxycarbonyl]cyclopropyl]-2,2-dimethyl-, 1,1-dimethylethyl ester, [1R-[1.alpha.(S*),2.beta.]]-(9CI)

(CA INDEX NAME)

Absolute stereochemistry.

RN 134525-27-2 CAPLUS
CN Cyclopropanecarboxylic acid,
2-[1-[[(1,1-dimethylethoxy)carbonyl]amino]-2hydroxyethyl]-, methyl ester, [1R-[1.alpha.,2.alpha.(5*)]]- (9CI)

INDEX NAME)

Absolute stereochemistry.

CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1991:449133 CAPLUS
DOCUMENT NUMBER: 115:49133
TITLE: Method for preparation of insecticidal and acaricidal

.alpha.-cyano-3-phenoxybenzyl 3-(2-chloro-3,3,3-trifluoroprop-1-enyl)-2,2-dimethylcyclopropanecarboxylate esters Tichy, Milos; Zavada, Jiri, Stibor, Ivan; Votava, Vladimir; Vesely, Ivan; Dolansky, Vladimir; INVENTOR(S):

Prosek,

Zdenek; Smid, Ivan; Mostecky, Jiri Czech. Czech., 5 pp. CODEN: CZXXA9

PATENT ASSIGNEE(S): SOURCE:

DOCUMENT TYPE: LANGUAGE:

FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

GΙ

APPLICATION NO. DATE PATENT NO. KIND DATE B1 19900314 CS 1988-5707 CS 268475 19880819

The racemic ester (I) and its optical or geometrical isomers, active

insecticides and acaricides (no data), were prepd. by esterification of

the parent cyclopropanecarboxylate alkali metal salts (II; R = 0-M+;

alkali metal), preferably with the cis-configuration on the

cyclopropane ring, with 3-PhOC6H4CH(CN)OSO2C6H4Me-4 (III) in a inert org. solvent

or in

a solvent-H20 mixt., optionally in the presence of a quaternary
ammondum
salt as phase-transfer catalyst at 20-80.degree. Thus, 2 mL
MePh, 725 mg III, and 15 mg PhCH2N+Et3 Br- were added to a soln. of

L7 ANSWER 49 OF 139 CAPLUS COPYRIGHT 2002 ACS Absolute stereochemistry. (Continued)

RN 117857-92-8 CAPLUS
CN Cyclopropanecarboxylic acid,
2-[1-[[(1,1-dimethylethoxy]carbonyl]amino]-2hydroxyethyl]-, ethyl ester, [1S-[1.alpha.,2.alpha.(R*)]]- (9CI) (CA
INDEX NAME)

Absolute stereochemistry.

ANSWER 50 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued) racemic II (R = OH) in 1.1 mL 1.95N aq. NaOH and the mixt. was stirred vigorously 6 h at 70.degree. to give 842 mg I as a yellowish oil comprising an approx. equimolar diastereoisomeric mixt. 72257-63-7 72257-64-7 72257-64-7

72257-63-7 72257-64-8
RI: RCT (Reactant)
(esterification of, by phenoxybenzyl tosylate deriv., in prepn. of insecticide and acaricide)
72257-63-7 CAPLUS
72257-64-8 CAPLUS
134454-38-9P 134677-68-2P 134677-71-7P
134657-72-8P
RI: AGR (Agricultural use), BAC (Biological activity or effector, ot

Relative stereochemistry.
Double bond geometry unknown.

RN 134677-68-2 CAPLUS
CN Cyclopropanecarboxylic acid,
3-(2-chloro-3,3-trifluoro-1-propenyl)-2,2dimethyl-, cyano(3-phenoxyphenyl)methyl ester, [1.alpha.(R*),3.beta.](9CI) (CA INDEX NAME)

Relative stereochemistry.
Double bond geometry unknown.

RN 134677-71-7 CAPLUS RN 134677-72-8 CAPLUS CN Cyclopropanecarboxylic acid, 3-(2-chloro-3,3,3-trifluoro-1-propenyl)-2,2-

L7 ANSWER 50 OF 139 CAPLUS COPYRIGHT 2002 ACS dimethyl-, cyano(3-phenoxyphenyl)methyl ester, [1.apha.(5),3.beta.](9CI) (CA INDEX NAME) (Continued)

Relative stereochemistry.
Double bond geometry unknown.

ANSWER 51 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued) desilylation provides the aminocyclopropane VII in good overall

g, thus demonstrating that cyclopropanes like VI may serve as useful synthetic intermediates. 132592-83-79: 132592-85-99 132592-87-19

RE: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation) (prepn. and cyclization of, with base) 12592-03-7 CAPLUS

Cyclopropanecarboxylic acid, 2-(aminomethyl)-, methyl ester, hydrochloride, cis- (9CI) (CA INDEX NAME)

Relative stereochemistry.

HC1

132592-85-9 CAPLUS Cyclopropanecarboxylic acid, 2-(aminomethyl)-2-methyl-, methyl ester, hydrochloride, cis- (9CI) (CA INDEX NAME)

Relative stereochemistry.

• HC1

132592-87-1 CAPLUS Cyclopropanecarboxylic acid, 2-(aminomethyl)-2-methyl-, methyl ester, trans- (9CI) (CA INDEX NAME)

Relative stereochemistry.

$$\begin{array}{c|c} \text{Me} & \\ \\ \text{R} & \\ \end{array} \\ \begin{array}{c} \text{OMe} \\ \end{array}$$

132592-79-1P 132592-80-4P RL: RCT (Reactant); SFN (Synthetic preparation); PREP (Preparation)

L7 ANSWER 51 OF 139 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1991:409263 CAPLUS
DOCUMENT NUMBER: 115:9263
TITLE:

An efficient route to GABA-analogous amino acids: cyclopropantion of N-silylated allylamines and enamines

enamines Paulini, Klaus; Reissig, Hans Ulrich Inst. Org. Chem., Tech. Hochsch. Darmstadt, AUTHOR (S): CORPORATE SOURCE: Darmstadt,

SOURCE:

D-6100, Fed. Rep. Ger. Liebigs Ann. Chem. (1991), (5), 455-61 CODEN: LACHDL; ISSN: 0170-2041 Journal DOCUMENT TYPE:

LANGUAGE: OTHER SOURCE(S): German CASREACT 115:9263

$$(\text{Me}_3\text{Si})_2\text{NCH}_2 \xrightarrow{\text{CO}_2\text{Me}} \text{H}_2\text{NCH}_2 \xrightarrow{\text{CO}_2\text{Me}} \text{H}_1 \text{III} \qquad \text{R}_1 \text{IV}$$

$$(\text{Me}_3\text{Si})_2\text{NC} \xrightarrow{\text{CO}_2\text{Me}} \text{H}_2\text{NC} \xrightarrow{\text{CH}_2\text{CH}} \text{H}_2 \text{H}_2$$

AB N-Silylated allylamines R2C:CR1CH2N(SiMe3)2 (I; R = H, R1 = H, Me; R = Me, R1 = H) are effectively transformed into Me cyclopropanecarboxylates Libert

R1 = H) are effectively transformed into me cyclopion.

If by

Me diazoacetate under Rh2(OAc)4 catalysis. Derivs. II (R = H) are
smoothly converted into trans substituted amino acids III and to
bicyclic
.gamma.-lactams IV. Thus, the pharmacol. interesting
.gamma-aninobutyric
acid (GABA) analog III (R1 = H) is now available in few steps.
Photochem.
and thermal Fe(CO)5-induced hydrogen shift converts allylamine
derivs. I

derivs. I

(R = H) into N-silylated enamines MeCR1:CHN(SiMe3) 2 (V). While

enamine
(E)-V (R1 = H) be cyclopropanated with Me diazoacetate under Cu

(E)-V (R1 = H) be cyclopropanated with ne clarity catalysis to afford the desired cyclopropane derivs. VI in good yield, the other enamines are rather unreactive towards the carbenoid. Use of an optically active catalyst provides VI with an enantiomeric excess of 56% (cis) and 20% (trans). Acid-induced ring cleavage of VI gives the .beta.-formyl ester ORCCHMeCH2CO2Me, and redn. of VI followed by

L7 ANSWER 51 OF 139 CAPLUS COPYRIGHT 2002 ACS (prepn. and desitylation of)
RN 132592-79-1 CAPLUS
CN Cyclopropanecarboxylic acid,
2-[[bie(trimethylsily]) aminolmethyl]-2-methyl,
methyl ester, cis- (9CI) (CA INDEX NAME) (Continued)

| 132592-80-4 CAPLUS | Cyclopropanecarboxylic acid, |{|bis(trimethylsilyl)amino|methyl}-2-methyl-|, methyl ester, trans- (9CI) (CA INDEX NAME)

IT

132592-84-8P 132592-86-0P
RL: RCT (Reactant), SPN (Synthetic preparation), PREP (Preparation)
(prepn. and sapon. of)
132592-84-8 CAPLUS
Cyclopropanecarboxylic acid, 2-(aminomethyl)-, methyl ester,
hydrochloride, trans- (9CI) (CA INDEX NAME)

Relative stereochemistry.

• HC1

132592-86-0 CAPLUS

Cyclopropanecarboxylic acid, 2-(aminomethyl)-2-methyl-, methyl ester, hydrochloride, trans- (9CI) (CA INDEX NAME)

Relative stereochemistry.

■ HC1

82259-99-2P 82260-00-2P 132592-81-5P 132592-82-6P 132592-90-6P 132696-26-5P 132696-27-6P 132696-28-7P IT RL: SPN (Synthetic preparation); PREP (Preparation) RL: SPN (synthetic preparation), PREP (Preparation)
(preppn. of)
RN 82259-99-2 CAPLUS
RN 82250-00-2 CAPLUS
RN 132592-81-5 CAPLUS
CN Cyclopropanecarboxylic acid,
3-[[bis(trimethylsi)y])amino[methyl]-2,2dimethyl-, methyl ester, cis- (9CI) (CA INDEX NAME)

Relative stereochemistry.

RN 132592-82-6 CAPLUS
CN Cyclopropanecarboxylic acid,
3-[[bis(trimethyls]:yl]amino]methyl]-2,2dimethyl-, methyl ester, trans- (9CI) (CA INDEX NAME)

Relative stereochemistry.

132592-90-6 CAPLUS Cyclopropanecarboxylic acid, 2-(aminomethyl)-2-methyl-, trans- (9CI) (CA INDEX NAME)

ANSWER 51 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

132592-91-7F 132696-25-4F RL: SPN (Synthetic preparation); PREP (Preparation) (prepn., hydrolysis-ring cleavage, and hydride redn. of) 132592-91-7 CAPUS 132592-91-7 CAPLUS Cyclopropanecarboxylic acid, 2-{bis{trimethylsilyl}amino}-3-methyl-, methyl ester, (1.alpha.,2.alpha.,3.beta.)- (9CI) (CA INDEX NAME)

Relative stereochemistry.

132696-25-4 CAPLUS
Cyclopropanecarboxylic acid, 2-[bis(trimethylsilyl)amino]-3-methyl-,
methyl ester, (1.alpha.,2.beta.,3.alpha.)- (9CI) (CA INDEX NAME)

Relative stereochemistry.

L7 ANSWER 51 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued) Relative stereochemistry.

132696-26-5 CAPLUS
Cyclopropanecarboxylic acid, 2-[bis(trimethylsilyl)amino]-3-methyl-,
methyl ester, (1.alpha.,2.beta.,3.beta.)- (9CI) (CA INDEX NAME)

Relative stereochemistry.

132696-27-6 CAPLUS
132696-28-7 CAPLUS
132592-77-9P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)
(prepn., desilylation, and desilylation-cyclization of)
12592-77-9 CAPLUS
Cyclopropanecarboxylic acid, 2-[[bis(trimethylsilyl)amino]methyl]-,

methyl ester, cis- (9CI) (CA INDEX NAME)

Relative stereochemistry.

132592-78-OF
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation) (prepn., desilylation, and desilylation-sapon. of) 132592-78-O CAPLUS
Cyclopropanecarboxylic acid, 2-[[bis(trimethylsilyl)amino]methyl]-,

methyl ester, trans- (9CI) (CA INDEX NAME)

Relative stereochemistry.

L7 ANSWER 52 OF 139 CAPLUS COPYRIGHT 2002 ACS ACCESSION NUMBER: 1991:228701 CAPLUS DOCUMENT NUMBER: 114:228701

TITLE: rhodium Tandem cyclization-cycloaddition reaction of

carbenoids. Studies dealing with the geometric requirements of dipole formation Padwa, Albert; Chinn, Richard L.; Hornbuckle,

AUTHOR (5):

F.; Zhang, Zhijia J.
Dep. Chem., Emory Univ., Atlanta, GA, 30322, USA
J. Org. Chem. (1991), 56(10), 3271-8
CODEN: JOCEAH: ISSN: 0022-3263

CORPORATE SOURCE: SOURCE:

DOCUMENT TYPE:

LANGUAGE: OTHER SOURCE(S):

English CASREACT 114:228701

AB The carbenoid intermediate derived by the treatment of several 1-diazobutanediones with Rh(II) acetate undergoes ready transannular cyclization onto the neighboring keto group to give 5-membered ring carbonyl ylides. The dipole derived from Eto2ccNwecoCHW2 (I; R = H) underwent a rapid proton transfer, producing 5-ethoxy-4-methyl-3-(ZH)-furanone. When the position adjacent to the diazo carbonyl group is blocked with 2 substituent groups, however, smooth 1,3-dipolar cycloaddh.

occurs. Thus. Rh-catalysed colision of 1 (2)

naddn.

occurs. Thus, Rh-catalyzed cyclization of I (R = Me) and subsequent reaction with Me02CC.tplbond.CCO2Me gave cycloadduct II. The obsd. regioselectivity can be nicely accommodated in terms of frontier MO

theory. A type II FMO interaction is involved since carbonyl ylides possess one of the smallest HOMO-LUMO energy gaps of common

coed a mixt. of products. In addn. to the expected cycloadduct, a product derived from the bimol. addn. of the rhodium carbenoid to benzene was obtained. The formation of a mixt. of products in this case suggests

entropic factors have sufficiently retarded the rate of intramol. cyclization so as to allow the bimol. reaction with benzene to occur.

observable cycloadduct was obtained from the diszohexanedione system, thereby indicating that the longer tether was sufficient to shut down dipole formation.

3697-66-3, 1,1-Cyclopropanedicarboxylic acid monoethyl ester RE: RCT (Reactant)

L7 ANSWER 52 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued) (diazomethylation of)
RN 3697-66-3 CAPLUS
CN 1,1-Cyclopropanedicarboxylic acid, monoethyl ester (8CI, 9CI) (CA CN INDEX

_ CO2H -OEt

56172-71-5P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation) (prepn. and diazomethylation of) 56172-71-5 CAPLUS
Cyclopropanecarboxylic acid, 1-acetyl- (9CI) (CA INDEX NAME)

_CO2H

ΙT 133374-46-6P SPN (Synthetic preparation); PREP (Preparation) (prepn. and rhodium-catalyzed cyclization and cycloaddn. reaction of.

with acetylenedicarboxylate)
133374-46-6 CAPLUS
Cyclopropanecarboxylic acid, 1-(diazoacetyl)-, ethyl ester (9CI) (CA
INDEX NAME)

ANSWER 53 OF 139 CAPLUS COPYRIGHT 2002 ACS ester, (1R,3R)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

ACCESSION NUMBER: 1991:207550 CAPLUS
DOCUMENT NUMBER: 14:207550 CAPLUS
TITLE: Preparation of trans-chry
INVENTOR(S): Hagitani. Kodus. Spin-re-

114:207550
Preparation of trans-chrysanthemic acids
Hagitani, Kojur Fukac, Masamir Sakane, Hirokor
Suzukamo, Gohfu
Sumitomo Chemical Co., Ltd., Japan
Jpn. Kokai Tokkyo Koho, 5 pp.
CODEN: JXXXAF
Patent

PATENT ASSIGNEE(S): SOURCE:

DOCUMENT TYPE: Patent LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION: Japanese

PATENT NO. KIND DATE APPLICATION NO. DATE JP 03027343 JP 2952674 OTHER SOURCE(S): A2 19910205 B2 19990927 MARPAT 114:207550 JP 1989-161293 19890623

Me Me Me Me CO2R I

The title compds. trans-I (R = H, C1-20 alkyl, cycloalkyl, aralkyl), useful as intermediates for insecticidal pyrethroids, are prepd. by treatment of cis-I or its mixts. with trans-I with Her in the

presence of .1/500 mol (per mol I) O. A soln. of HBr/AcOH in toluene was added

added dropwise to 10 g cis-I (R = H) (II) in toluene under O/N (1:9) at atm. pressure (free space vol. of a flask 100 mL) at 20.degree. over 30 min toluene vol. of a flask 100 mL) at 20.degree. over 30 min toluene vol. of a flask 100 mL) at 20.degree. over 30 min toluene vol. of a flask 100 mL) at 20.degree. over 30 min toluene vol. of a control at 30

L7 ANSWER 54 OF 139 CAPLUS COPYRIGHT 2002 ACS ACCESSION NUMBER: 1991:206628 CAPLUS DOCUMENT NUMBER: 114:206628 CAPLUS Preparation of cis- and trans-3-[2-(E/Z)-halo-3, 3, 3-

trihalo-1-propenyl]-2,2-dimethylcyclopropanecarboxylic acid esters as insecticides Hoare, John Harold FMC Corp., USA.
SOURCE: BRILL UK Pat. Appl., 45 pp. COERS. BAXXDU
DOCUMENT TYPE: Patent LANGUAGE: EAXING FAMILY ACC. NUM. COUNT: 1

DOCUMENT TYPE: LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

PATENT NO. APPLICATION NO. DATE GB 1990-4711 19900 KIND DATE GB 2229181
GB 2229181
US 4960922
PRIORITY APPLN. INFO.:
OTHER SOURCE(S):
GI A1 B2 A 19900919 19920520 19901002 19901002 US 1989-323652 19890315 US 1989-323652 19890315 MARPAT 114:206628

AR Esters of the title acids (I; R, R1 = halo; R2 = H), useful as insecticides or intermediates of pyrethroid insecticides (no data),

prepd. by dehydrohalogenation of tetrahalopropyl analogs (II) with an alkali and/or alk. earth metal base in a polar aprotic anhyd.

alkali and/or alk. earch metal wave in a policy in solvent, in the presence of catalytic amts. of cyclic amidines, e.g., DBU or DBN (heterocycle). Thus, 2,6-(dichlorophenyl)methyl cis/trans-3-(2,2-dichloro-3,3,3,3-trifluoropropyl)-2,2-dimethylcyclopropanecarboxylate 771.5,

246.0, CaO 44.0, and DBU 76.0 g in 2000 mL AcNMe2 was heated 22.25 h

at 82-93.degree. to give 724 g product contg. 29.05 wt.% title ester (I; R =

R = F, R1 = C1, R2 = 2,6-C12C6H3CH2).

IT 78999-16-3D, esters
RL: RCT (Reactant)
(dehydrohalogenation of, in prepn. of insecticides)
RN 78999-16-3 CAPIUS
CN Cyclopropanecarboxylic acid,
3-(2,2-dichloro-3,3,3-trifluoropropyl)-2,2-dimethyl- (9CI) (CA INDEX NAME)

83376-80-1P 83376-81-2P 83376-82-3P 83376-83-4P 133521-60-5P 133521-61-6P 133521-62-7P 133521-63-8P RL: AGR (Agricultural use); BAC (Biological activity or effector, ΙT

Relative stereochemistry. Double bond geometry as shown.

RN 83376-81-2 CAPLUS
CN Cyclopropanecarboxylic acid,
3-(2-chloro-3,3,3-trifluoro-1-propenyl)-2,2dimethyl-, methyl ester, [1.alpha.,3.alpha.(Z)]- (9CI) (CA INDEX

Relative stereochemistry.
Double bond geometry as shown.

RN 83376-82-3 CAPLUS
CN Cyclopropanecarboxylic acid,
3-(2-chloro-3,3,3-trifluoro-1-propenyl)-2,2-

L7 ANSWER 54 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

RN 133521-62-7 CAPLUS
CN Cyclopropanecarboxylic acid,
3-(2-chloro-3-,3,3-trifluoro-1-propenyl)-2,2dimethyl-, (2,6-dichlorophenyl)methyl ester, [1.alpha.,3.alpha.{2}]-(9CI) (CA INDEX NAME)

Relative stereochemistry.
Double bond geometry as shown.

RN 133521-63-8 CAPLUS
CN cyclopropanearboxylic acid,
3-(2-chloro-3,3,3-trifluoro-1-propenyl)-2,2dimethyl-, (2,6-dichlorophenyl)methyl ester, [1.alpha.,3.beta.{2}}(SCT) (9CI) (CA INDEX NAME)

Relative stereochemistry.
Double bond geometry as shown.

$$\begin{array}{c|c} & \text{Me} & \text{Me} \\ \hline & \text{C1} & \\ \hline & \text{F}_{3}\text{C} & \\ \end{array}$$

IT 74609-46-4DP, esters
RL: SPM (Synthetic preparation), PREP (Preparation)
(prepn. of, as insecticides)
RN 74609-46-4 CAPLUS
CN Cyclopropanecarboxylic acid,
3-(2-chloro-3,3,3-trifluoro-1-propenyl)-2,2-

ANSWER 54 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued) dimethyl-, methyl ester, [1.elpha.,3.beta.(E)]- (9CI) (CA INDEX NAME)

Relative stereochemistry.
Double bond geometry as shown.

RN 83376-83-4 CAPLUS CN Cyclopropanecarboxylic acid, 3-(2-chloro-3,3,3-trifluoro-1-propenyl)-2,2-dimethyl-, methyl ester, [1.alpha.,3.beta.(Z)]- (9CI) (CA INDEX NAME)

Relative stereochemistry.
Double bond geometry as shown.

RN 133521-60-5 CAPLUS
CN Cyclopropanecarboxylic acid,
3-(2-chloro-3,3,3-trifluoro-1-propenyl)-2,2dimethyl-, (2,6-dichlorophenyl)methyl ester, [1.alpha.,3.alpha.(E)]-(9CI) (CA INDEX NAME)

Relative stereochemistry.
Double bond geometry as shown.

RN 133521-61-6 CAPLUS
CN Cyclopropanecarboxylic acid,
3-(2-chlor-0-3,3,3-trifluoro-1-propenyl)-2,2dimethyl-, (2,6-dichlorophenyl)methyl ester, [1.alpha.,3.beta.(E)](SCI)
(CA INDEX NAME)

ANSWER 54 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued) dimethyl- (9CI) (CA INDEX NAME)

ANSWER 55 OF 139 CAPLUS COPYRIGHT 2002 ACS
SSION NUMBER: 1991:185016 CAPLUS
MENT NUMBER: 114:185016

DOCUMENT NUMBER: TITLE: Process for preparing .alpha.-cyanobenzyl cyclopropanoates
Hodacova, Jana; Tichy, Milos; Kral, Vladimir;

INVENTOR(S): Dvorak, Dalimil; Zavada, Jiri; Stibor, Ivan; Mostecky,

Jiri; Votava, Vladimir; Dolansky, Vladimir; et al.

PATENT ASSIGNEE(S): SOURCE: Czech. 9 pp. CODEN: CZXXA9 DOCUMENT TYPE:

LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION: Czech 1

APPLICATION NO. DATE PATENT NO. KIND DATE CS 265009 OTHER SOURCE(5): B1 19890912 MARPAT 114:185016 CS 1986-7146 19861003

AB The title compds. [I; R = (un)substituted C1-3 slkenyl; R1, R2 = H, halo]

were prepd. by reaction of sulfonate salts II (R3 = H, CH2CH2OH, M+ = alkali metal cation, ammonium: R1, R2 as above) with 1-3 equiv. of an alkali cyanide, 1 equiv. of the appropriate cyclopropanecarboxylic

acid (III), 1 equiv. of (NH4)2CO3 or an alkali metal carbonate, and 1-2

sulfonyl chloride R4502Cl [R4 = (Me-substituted) Ph], in the

and a H2O-immiscible solvent. A mixt. of III (R = cis-CC12:CH) 0.95, K2C02 1.39, II (R1 = R2 = R3 = H, M = Na) 1.55, KCN 0.98, PhCHZN+Et3 C1-0.67,

ANSWER 55 OF 139 CAPLUS COPYRIGHT 2002 ACS

74609-46-4 CAPLUS Cyclopropanecarboxylic acid, -chloro-3, 3,3-trifluoro-1-propenyl)-2,2-dimethyl- (9CI) (CA INDEX NAME)

133226-92-3 CAPLUS Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2-phenoxyethenyl)-) (CA INDEX NAME) CN (9CI)

IT

52315-07-8P 66824-41-7P 66841-26-7P 68085-85-8P 133226-90-1P 133226-91-2P RL: SPN (Synthetic preparation), PREP (Preparation) (prepn. of, method for) 52315-07-8 CAPLUS

52315-07-8 CAPLUS Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-, cyano(3-phenoxyphenyl)methyl ester (9CI) (CA INDEX NAME)

RN 66824-41-7 CAPLUS
CN Cyclopropanecarboxylic acid,
2,2-dimethyl-3-(1,2,2,2-tetrachloroethyl)-,
cyano(3-phenoxyphenyl)methyl ester (9CI) (CA INDEX NAME)

ANSWER 55 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued) and 4-CH3C6H4S02Cl 0.95 g in 5 mL H20 and 20 mL PhMe was stirred intensively for 70 h at the ambient temp. to give 1.88 g title compd.

R = cis-CCl2:CH, R1 = R2 = H). Some analogous esters are

Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-, (1R,3R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

59042-49-8 CAPLUS

Cyclopropanecarboxylic acid, 3-{2,2-dichloroethenyl}-2,2-dimethyl-, (1R,3R)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

66841-66-5 CAPLUS Cyclopropanecarboxylic acid, -dimethyl-3-(1,2,2,2-tetrachloroethyl)-(9CI) (CA INDEX NAME)

68198-91-4 CAPLUS Cyclopropanearboxylic acid, 3-(1,2-dibromo-2,2-dichloroethyl)-2,2-dimethyl- (9CI) (CA INDEX NAME)

ANSWER 55 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

66841-26-7 CAPLUS
Cyclopropanecarboxylic acid, 3-(1,2-dibromo-2,2-dichloroethyl)-2,2-dimethyl-, cyano(3-phenoxyphenyl)methyl ester (9CI) (CA INDEX NAME)

68085-85-8 CAPLUS
Cyclopropanecarboxylic acid,
-chloro-3,3,3-trifluoro-1-propenyl)-2,2dimethyl-, cyano(3-phenoxyphenyl)methyl ester (9CI) (CA INDEX NAME)

133226-90-1 CAPLUS
Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2-phenoxyethenyl)-,
cyano(3-phenoxyphenyl)methyl ester (9CI) (CA INDEX NAME)

133226-91-2 CAPLUS Cyclopropanecarboxylic acid, 3-(2,2-dichloroethyl)-2,2-dimethyl-, [3-chloro-5-(3-chlorophenoxy)phenyl]cyanomethyl ester (9CI) (CA INDEX NAME)

ANSWER 55 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

L7 ANSWER 56 OF 139 CAPLUS COPYRIGHT 2002 ACS ACCESSION NUMBER: 1991:122126 CAPLUS DOCUMENT NUMBER: 114:122126

TITLE: Bis(oxazolines) as chiral ligands in

metal-catalyzed

asymmetric reactions. Catalytic, asymmetric cyclopropanation of olefins Evans, David A.; Woerpel, Keith A.; Hinman, Mira AUTHOR(S): M.;

Faul, Margaret M. Dep. Chem., Harvard Univ., Cambridge, MA, 02138, CORPORATE SOURCE:

J. Am. Chem. Soc. (1991), 113(2), 726-8 CODEN: JACSAT; ISSN: 0002-7863 SOURCE:

DOCUMENT TYPE:

Journal English CASREACT 114:122126 OTHER SOURCE(S):

Chiral bis (oxazoline) derivs., e.g. I (R = CHMe2, CMe3; R1 = H, Me)

used upon complexation with cuprous triflate for the stereoselective cyclopropanation of styrene. Thus, the cyclopropanation of styrene

N2CH2CO2Et in the presence of I (R = CMe3; R1 = Me) and cuprous triflate
gave cyclopropanecarboxlates II (R3 = H, R4 = Ph) and II (R3 = Ph, R4

in 77t overall yield, in a 73:27 isomer ratio and in 99 and 97t enantiomeric excess, resp. Other monosubstituted or 1,1-disubstituted olefins behaved similarly, giving cyclopropyl esters, essentially with

olerins behaved Similarly, giving cyclopropyl esters, essentially with abs. stereocontrol.

131899-82-6P 131899-85-9P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation) (prepn. and redn. of)

131899-82-6 CAPLUS
Cyclopropamecarboxylic acid, 2-phenyl-, 2,6-bis(1,1-dimethylethyl)-4-methylphenyl ester, (1R-trans)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

ANSWER 56 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

131899-85-9 CAPLUS Cyclopropanecarboxylic acid, 2-phenyl-, 2,6-bis(1,1-dimethylethyl)-4-methylphenyl ester, (1R-cis)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

34702-96-0P 34703-00-9P RL: RCT (Reactant): SPN (Synthetic preparation): PREP (Preparation) (prepn. and transamination or epimerization of) 34702-36-0 CAPLUS

Cyclopropanecarboxylic acid, 2-phenyl-, ethyl ester, (15,25)- (9CI)

INDEX NAME)

Absolute stereochemistry. Rotation (+).

Cyclopropanecarboxylic acid, 2-phenyl-, ethyl ester, (1s,2R)- (9CI) CN (CA

Absolute stereochemistry. Rotation (+).

L7 ANSWER 56 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

23020-15-7P 23020-18-0P 34702-97-1P 34716-60-4P 67428-04-0P 89007-61-4P 131833-95-9P 131899-81-5P 131899-83-7P 131899-84-8P RL: SPN (Synthetic preparation); PREP (Preparation)

(preparation); PREP (Preparation); PREP (preparation)
(prepa. of)
RN 23020-15-7 CAPLUS
CN Cyclopropanecarboxylic acid, 2-phenyl-, (15,25)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

RN 23020-18-0 CAPLUS CN Cyclopropanecarboxylic acid, 2-phenyl-, (1s,2r)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

34702-97-1 CAPLUS Cyclopropanecarboxylic acid, 2-phenyl-, ethyl ester, (1R,2S)- (9CI)

INDEX NAME)

Absolute stereochemistry. Rotation (-).

34716-60-4 CAPLUS Cyclopropanecarboxylic acid, 2-phenyl-, ethyl ester, (1R,2R)- (9CI)

INDEX NAME)

L7 ANSWER 56 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued) Absolute stereochemistry. Rotation (-).

RN 67428-04-0 CAPLUS
CN Cyclopropanecarboxylic acid, 2,2-diphenyl-, ethyl ester, (1S)- (9CI)

Absolute stereochemistry. Rotation (+).

89007-61-4 CAPLUS Cyclopropanecarboxylic acid, 2,2-dimethyl-, ethyl ester, (S)- (9CI) INDEX NAME)

Absolute stereochemistry.

131833-95-9 CAPLUS Cyclopropanecarboxylic acid, 2-phenyl-, 2,6-dimethylphenyl ester, (1R-trans)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 131899-81-5 CAPLUS

L7 ANSWER 57 OF 139 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1990:553041 CAPLUS
103:153041 CAPLUS
113:153041
Preparation of (2R, 3S, 4S) - alpha(carboxycyclopropyl) glycine as a

N-methyl-D-aspartic

acid (NMDA)-type glutamate receptor agonist Ohfune, Yasufumi, Shimamoto, Keiko, Shinozaki, Haruhiko, Ishida, Michiko Suntory, Ltd., Japan Eur. Pat. Appl., 6 pp. CODEN: EPXXDW Patent INVENTOR(S):

PATENT ASSIGNEE(S): SOURCE:

DOCUMENT TYPE: LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION: English

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 363994	A2	19900418	EP 1989-119266	19891017
EP 363994	A3	19910327		
EP 363994	B1	19930922		
R: AT, BE,	CH, DE	ES, FR, GB	, IT, LI, LU, NL, SE	
JP 02108654	A2	19900420	JP 1988-261155	19881017
JP 2757960	B2	19980525		
US 5068412	A	19911126	US 1989-422796	19891017
AT 94867	E	19931015	AT 1989-119266	19891017
ES 2059669	Т3	19941116	ES 1989-119266	19891017
PRIORITY APPLN. INFO.			JP 1988-261155	19881017
			EP 1989-119266	19891017
GI			2. 2505 119200	17031017

AB The title compd. (I), a conformationally restricted glutamatergic agonist

L7 ANSWER 56 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)
CN Cyclopropanecarboxylic acid, 2-phenyl-, 1,1-dimethylethyl ester,
(1R,2R)-(9CI) {CA INDEX NAME}

Absolute stereochemistry. Rotation (-).

RN 131899-83-7 CAPLUS CN Cyclopropanecarboxylic acid, 2-phenyl-, 1,1-dimethylethyl ester, CN Cyclopropance (1R, 2S) -(9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

131899-84-8 CAPLUS Cyclopropanecarboxylic acid, 2-phenyl-, 2,6-dimethylphenyl ester, (1R-cis)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

ANSWER 57 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued) useful as a tool to investigate various neuronal functions related to

excitatory amino acid receptors, was prepd. by a procedure comprising

(1)

cycloaddn. reaction of (2R)-2-aminobutenol deriv. (II) Boc = tert-butyoxycarbonyl; TBDMS = tert-butyldimethylsilyl) with Bt diazoacetate in Et20 in the presence of Pd(Okc)2; (2) removal of TBDMS groups from the resulting mixt. of 4 stereoisomers of (2R)-alpha-(carboxycyclopropyl) glycinol derivs. (III) by an acid catalyst, e.g., D,L-camphorsulfonic acid in Et0H; (3) chromatog, sepn. of carboxycyclopropyl alcs. (IV and V), and oxidn. of IV by Jones reagent followed by deprotection. In an electrophysiol. expt. with the isolated newborn rat spinal cord I had a min. effective concn. of 3 .times.

mol./L vs. 1 .times. 10-4 for L-glutamic acid.
IT 129569-17-1P 129569-18-2P RL: SPN (Synthetic preparation); FORM (Formation, nonpreparative);

PREP

(Preparation)
(formation of, in prepn. of glutamatergic agonist)
RN 129569-17-1 CAPLUS
CN Cyclopropaneararboxylic acid,
2-[1-[(1,1-dimethylethoxy) carbonyl] amino]-2hydroxyethyl]-, ethyl ester (9CI) (CA INDEX NAME)

RN 129569-18-2 CAPLUS
CN Cyclopropanecarboxylic acid,
2-[1-[[(1,1-dimethylethoxylcarbonyl]amino]-2hydroxyethyl]-, ethyl ester, [1s-[1.alpha.,2.alpha.(5*)]]- (9CI)
INDEX NAME)

(CA

Absolute stereochemistry.

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)

L7 ANSWER 57 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)
(prepn. and Jones oxidn. of, in prepn. of glutamatergic agonist)
RN 129569-16-0 CAPLUS
CN Cyclopropanecarboxylic acid,
2-[1-[[(1,1-dimethylethoxy) carbonyl] amino]-2hydroxyethyl]-, ethyl ester, [15-[1.alpha.,2.beta.(S*)]]- (9CI) (CA
INDEX
NAME)

Absolute stereochemistry.

129569-19-3P
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. and conversion to acid, in prepn. of glutamatergic

(prepn. and conversion to acto, in plant agonist)
RN 129569-19-3 CAPLUS
CN Cyclopropaneacetic acid, .alpha.-amino-2-carboxy-, monoammonium salt,
[1s-[1.alpha.(S*),2.beta.]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

● мнз

IT 129569-15-9P 129569-91-1P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation) (prep. and deprotection of, in prepn. of glutamatergic agonist)
RN 129569-15-9 CAPLUS
CN Cyclopropanecarboxylic acid,
2-[1-[[(1,1-dimethylethoxy)carbonyl]amino]-2[[(1,1-dimethylethyl)dimethylsilyl]cxy]ethyl]-, ethyl ester (9CI)
(CA

INDEX NAME)

L7 ANSWER 58 OF 139 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1990:216372 CAPLUS
DOCUMENT NUMBER: 112:216372
TITLE: Phase-transfer catalyzed synthesis of amides and esters of carboxylic acids
AUTHOR(S): Jauzay, Zauzas M.; Petnehazy, Imre; Toke, Laszlo CORPORATE SOURCE: Synthesis (1989), (10), 745-7
CODEN: SYNTBF, ISSN: 0039-7881
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 112:216372
AB A convenient one-pot procedure is reported for the prepa. of carboxamides
and esters from RCOZH (e.s., R - Ph, 2-HOCGH4) and amines.

and esters from RCO2H (e.s., R = Ph, 2-HOC6H4) and amines,

and estate from Account the Account of the Account

IT

PhCHENCI
as catalyst.
59042-50-1
RL: PROC (Process)
(conversion of, to amides and esters)
59042-50-1 CAPIUS
Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-,
(1R,3S)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

IT

827-90-7
RL: RCT (Reactant)
(esterification of)
827-90-7 CAPLUS
77646-99-2P 107297-36-3P
RL: SPN (Synthetic preparation); PREP (Preparation)

(prepn. of)
77646-99-2 CAPLUS
Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2-methyl-1-propenyl)-,
phenylmethyl ester, (1R,3R)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

ANSWER 57 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

129569-91-1 CAPLUS
Cyclopropaneacetic acid, 2-carboxy-.alpha.-[{(1,1-dimethylethoxy)carbonyl]amino]-, [15-{1.alpha.(5*),2.beta.]]- (9CI)

INDEX NAME)

Absolute stereochemistry.

125412-11-5P
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of, as glutamatergic agonist)
125412-11-5 CAPLUS
Cyclopropaneacetic acid, .alpha.-amino-2-carboxy-, (.alpha.R,1S,2S)-

(CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

L7 ANSWER 58 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

107297-56-3 CAPLUS

Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-phenylmethyl ester, (1R,35)-rel- (9CI) (CA INDEX NAME)

L7 ANSWER 59 OF 139 CAPLUS COPYRIGHT 2002 ACS ACCESSION NUMBER: 1990:179518 CAPLUS DOCUMENT NUMBER: 112:179518
TITLE: Prenaration

Preparation of trans-chrysanthemumic acid derivatives

by isomerization Suzukamo, Gohfu; Fukao, Masami; Sakito, Yoji Sumitomo Chemical Co., Ltd., Japan Jpn. Kokai Tokkyo Koho, 6 pp. CODEN: JXXXAF INVENTOR(s): PATENT ASSIGNEE(s): SOURCE:

DOCUMENT TYPE: Japanese

LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

PATENT NO. APPLICATION NO. DATE KIND DATE A2 19891117 B4 19950301 MARPAT 112:179518 JP 01287053 JP 07017567 OTHER SOURCE(S): JP 1988-115371 19880512

AB The title derivs. trans-I (X = OH, halo, C1-20 alkoxy, aralkyloxy, 2,2-dimethyl-3-isobutenylcyclopropanecarbonyloxy), useful as intermediates
for pyrethroid insecticides, are prepd. by treatment of cis-I, or their

mixts. with trans-I, with SH compds. in the presence of peroxides or

azo compds. A toluene soln. of PhSH was added dropwise to a mixt. of cis-I (X

— OH) (1.0 g), NCCMe2N:NCMe2CN, and toluene at 80.degree. and the reaction

- GH) (1.0 g), NCCMe2N:NCMe2CN, and toluene at 80.degree. and the reaction
mixt. was further stirred at 80.degree. for 1 h to give 0.92 g I
(dis/trans = 8.5/91.5).

IT 18259-78-6. cis-Chrysanthemumic acid
RL: RCT (Reactant)
(isomerization of, catalysts for)
RT 18259-78-6 CAPLUS
RT 287-90-77, trans-Chrysanthemumic acid 1802-02-4F, Ethyl
trans-chrysanthemate 14297-82-6F 24141-52-4F, Methyl
trans-chrysanthemate 9639-39-0F, Buyl trans-chrysanthemate
RL: SFN (Synthetic preparation): PREF (Preparation)
(prepn. of, by isomerization)
RN 27-90-7 CAPLUS
RN 1802-02-4 CAPLUS
RN 1802-02-4 CAPLUS

CN ethyl

ester, (1R,3R)-rel- (9CI) (CA INDEX NAME)

L7 ANSWER 59 OF 139 CAPLUS COPYRIGHT 2002 ACS

L7 ANSWER 59 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

Relative stereochemistry.

14297-82-6 CAPLUS Inc. - CAPUS (Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2-methyl-1-propenyl)-, anhydride (9CI) (CA INDEX NAME)

24141-52-4 CAPLUS Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2-methyl-1-propenyl)-, methyl ester, (1R,3R)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

96393-69-0 CAPLUS Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2-methyl-1-propenyl)-, CN Cyclopropantoling butyl ester, (1R,3R)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

L7 ANSWER 60 OF 139 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1989:614709 CAPLUS
DOCUMENT NUMBER: 111214709
Attempted and accomplished syntheses of a few monofluorinated chrysanthemic acid derivatives
CORPORATE SOURCE: Cottens, Sylvain; Schlosser, Manfred
Inst. Chim. Org., Univ. Lausanne, Lausanne, AUTHOR(S): CORPORATE SOURCE: CH-1005,

Switz. Tetrahedron (1988), 44(23), 7127-44 CODEN: TETRAB; ISSN: 0040-4020 Journal English CASRRACT 111:214709 SOURCE:

DOCUMENT TYPE: LANGUAGE: OTHER SOURCE(S): GI

AB A sulfone mediated approach presumably did produce Me .alpha-fluorochrysanthemate I but, if formed, the latter immediately underwent

went dehydrofluorination under the strongly basic reaction conditions. The cis- and trans-isomers of Me .beta.- and .gamma.-fluorochysanthemates

and III were concomitantly obtained by treating
3-fluoro-2,5-dimethyl-2,4hexadiene with N2CH2CO2Me in the presence of catalytic amts. of

Rh (OAc) 2.

Rh(OAc)2.

After enzymic and chromatog, sepn, the four individual components were converted to the m-phenoxybenzyl esters.

IT 123502-20-5P 123502-21-6P 123502-22-7P
Rl: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation) (prepn. and esterification of)
RN 123502-20-5 CAPLUS
CN Cyclopropanecarboxylic acid, 2-fluor-3, 3-dimethyl-2-(2-methyl-1-propenyl)-, cis- (9CI) (CA INDEX NAME)

RN 123502-21-6 CAPLUS CN Cyclopropanecarboxylic acid, 3-(1-fluoro-2-methyl-1-propenyl)-2,2-dimethyl-, cis- (9CI) (CA INDEX NAME)

Relative stereochemistry.

RN 123502-22-7 CAPLUS CN Cyclopropanecarboxylic acid, 3-(1-fluoro-2-methyl-1-propenyl)-2,2-dimethyl-, trans-(9C1) (CA INDEX NAME)

Relative stereochemistry.

IT 123502-15-8F 123502-16-9F 123502-17-0F
RL: RCT (Reactant): SFN (Synthetic preparation): PREP (Preparation)
(prepn. and hydrolysis of)
RN 123502-15-8 CAPLUS
CN Cyclopropasecarboxylic acid,
3-(1-fluoro-2-methyl-1-propenyl)-2,2-dimethyl, 1,1-dimethylethyl ester, cis- (9CI) (CA INDEX NAME)

Relative stereochemistry.

L7 ANSWER 60 OF 139 CAPLUS COPYRIGHT 2002 ACS

RN 123502-04-5 CAPLUS
CN Cyclopropanecarboxylic acid,
2-fluoro-3,-3-dimethyl-2-{2-methyl-1-propenyl}, methyl ester, cis- (9CI) (CA INDEX NAME)

Relative stereochemistry.

RN 123502-06-7 CAPLUS
CN Cyclopropanecarboxylic acid,
2-fluoro-3,3-dimethyl-2-(2-methyl-1-propenyl), methyl ester, trans- (9CI) (CA INDEX NAME)

Relative stereochemistry.

RN 123502-07-8 CAPLUS
CN Cyclopropanecarboxylic acid,
3-(1-fluoro-2-methyl-1-propenyl)-2,2-dimethyl, methyl ester, cis- (9CI) (CA INDEX NAME)

Relative stereochemistry.

ANSWER 60 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

RN 123502-16-9 CAPLUS
CN Cyclopropanecarboxylic acid,
2-fluor-3,3-dimethyl-2-(2-methyl-1-propenyl), 1,1-dimethylethyl ester, cis- (9CI) (CA INDEX NAME)

Relative stereochemistry.

RN 123502-17-0 CAPLUS
CN Cyclopropanecarboxylic acid,
3-(1-fluoro-2-methyl-1-propenyl)-2,2-dimethyl, 1,1-dimethylethyl ester, trans- (9CI) (CA INDEX NAME)

Relative stereochemistry.

IT 123502-03-4F 123502-04-5F 123502-06-7F
123502-07-8F
RI: RCT (Reactant); SPN (Synthetic preparation); PREF (Preparation)
(prepn. and transesterification of)
RN 123502-03-4 CAPLUS
CN Cyclopropanecarboxylic acid,
3-(1-fluoro-2-mathyl-1-propenyl)-2,2-dimethyl, methyl ester, trans- (9CI) (CA INDEX NAME)

Relative stereochemistry.

L7 ANSWER 60 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

4638-92-0DP, fluoro derivs.
RL: SPN (Synthetic preparation); PREP (Preparation)

(prepn. of)
4638-92-0 CAPLUS
Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2-methyl-1-propenyl)-,
(1R,3R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

IT 123502-11-4P 123502-12-5P 123502-13-6P 123539-92-4P

RL: SPM (Synthetic preparation); PREP (Preparation) (prepn. of, as potential pyrethroid)

RN 123502-11-4 CAPLUS

CN Cyclopropanecarboxylic acid, 2-fluoro-3,3-dimethyl-2-(2-methyl-1-propenyl)-, ethyl ester, trans- (9CI) (CA INDEX NAME)

Relative stereochemistry.

RN 123502-12-5 CAPLUS
CN Cyclopropanecarboxylic acid,
3-(1-fluoro-Z-methyl-1-propenyl)-2,2-dimethyl, ethyl ester, trans- (9CI) (CA INDEX NAME)

ANSWER 60 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

RN 123502-13-6 CAPLUS
CN Cyclopropanecarboxylic acid,
2-(1-fluoro-2-methyl-1-propenyl)-3-methyl-,
1,1-dimethylethyl ester, (1.alpha.,2.alpha.,3.alpha.)- (9CI)
INDEX

Relative stereochemistry.

RN 123539-92-4 CAPLUS
CN Cyclopropanecarboxylic acid,
2-(1-fluoro-2-methyl-1-propenyl)-3-methyl-,
1,1-dimethylethyl ester, (1.alpha.,2.beta.,3.beta.)- (9CI) (CA INDEX NAME)

Relative stereochemistry.

123502-23-8P 123502-24-9P 123502-25-0P 123502-26-1P 123502-26-1P
RL: SPM (Synthetic preparation); PREP (Preparation)
(prepn. of, as potential pyrethroids)
RN 123502-23-8 CAPLUS
CN Cyclopropanecarboxylic acid,
2-fluoro-3,-d-inethyll-2-(2-methyl-1-propenyl), (3-phenoxyphenyl)methyl ester, trans- (9CI) (CA INDEX NAME)

L7 ANSWER 60 OF 139 CAPLUS COPYRIGHT 2002 ACS

īТ 123502-14-7P IT 123502-14-7P
RL: RCT (Reactant); SFN (Synthetic preparation); PREP (Preparation)
(prepn., ring cleavage, and hydrolysis of)
RN 123502-14-7 CAPLUS
CN Cyclopropaneoarboxylic acid,
2-fluoro-3,3-dimethyl-2-(2-methyl-1-propenyl), 1,1-dimethylethyl ester, trans- (9CI) (CA INDEX NAME)

Relative stereochemistry.

L7 ANSWER 60 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued) Relative stereochemistry.

RN 123502-24-9 CAPLUS
CN Cyclopropanecarboxylic acid,
3-(1-fluoro-2-methyl-1-propenyl)-2,2-dimethyl, (3-phenoxyphenyl)methyl ester, cis- (9CI) (CA INDEX NAME)

Relative stereochemistry.

RN 123502-25-0 CAPLUS
CN Cyclopropanecarboxylic acid,
2-fluoro-3,3-dimethyl-2-(2-methyl-1-propenyl), (3-phenoxyphenyl)methyl ester, cis- (9CI) (CA INDEX NAME)

Relative stereochemistry.

Relative stereochemistry.

RN 123502-26-1 CAPLUS
CN Cyclopropanecarboxylic acid,
3-(1-fluoro-2-methyl-1-propenyl)-2,2-dimethyl, (3-phenoxyphenyl)methyl ester, trans- (9CI) (CA INDEX NAME)

L7 ANSWER 61 OF 139 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1989:573178 CAPLUS
DOCUMENT NUMBER: 111:173178
Asymmetric hydrocyanation of a range of aromatic

and

AUTHOR(S):

AUTHOR(S):

CORPORATE SOURCE:

SOURCE:

DOCUMENT TYPE:

LANGUAGE:

OTHER SOURCE(S):

ACAREACE TILL:

ANOTHOR SOURCE(S):

ACAREACE TILL:

ANOTHOR SOURCE(S):

COEMIN Jackson, W. Roy; Jayatilake,
Gamini S.; Wilshire, Colin; Jacobs, Howard A.
Dep. Chem., Monash Univ., Clayton, 3168, Australia
Aust. J. Chem. (1988), 41(11), 1697-709

COEMIN AJCTRAS; ISSN: 0004-9425

Journal

English

OTHER SOURCE(S):

CASREACT 111:173178

AB A range of aryl, alkyl and heterocyclic aldehydes have been treated

with

HCM in the presence of the Years and the control of the cont

HCN in the presence of the Inoue catalyst, (R,R)- or (S,S)-cyclo(phenylalanylhistidyl). Most aryl aldehydes with electron-donating substituents in the m- or p-positions give high enantiomeric excess (e.e.) values (.gtoreq.80%), but aryl aldehydes

with

strong electron-withdrawing substituents gave moderate e.e. values
(.ltoreq.50%). These moderate values are believed to be due to
partial
racemization of the product cyanohydrins in the presence of the mildly
basic catalyst. In contrast to the reactions of aryl aldehydes,
reactions of alkyl aldehydes and of ketones gave low e.e. values
(.ltoreq.30%), an explanation is proposed.

IT 87725-85-7 122045-31-2
RL: RCT (Reactant)
(esterification of, with hydroxy nitriles, detn. of enantiomeric
excess

excess by) RN 87725-85-7 CAPLUS CN Cyclopropanecarboxylic acid, 3-(2-chloro-3,3,3-trifluoro-1-propenyl)-2,2-dimethyl-, [1R-[1.alpha.,3.alpha.(E)]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.

122045-31-2 CAPLUS RN 12243-31-2 CARLOS
CN Cyclopropanecarboxylic acid,
3-(2-chloro-3,3,3-trifluoro-1-propenyl)-2,2dimethyl-, [15-[1.alpha.,3.alpha.(E)]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Double bond geometry as shown.

İΤ

121950-23-OP 121950-24-1P 121950-25-2P RL: RCT (Reactant) SPN (Synthetic preparation); PREP (Preparation) (prepn. and racemization of) 121950-23-0 CAPLUS

RN 121950-23-0 CAPLUS
CN Cyclopropanecarboxylic acid,
3-(2-chloro-3,3,3-trifluoro-1-propenyl)-2,2dimethyl-, cyano[4-(trifluoromethyl)phenyl]methyl ester,
[1R-[1.alpha.(R*),3.alpha.(E)]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.

RN 121950-24-1 CAPLUS
CN Cyclopropanecarboxylic acid,
3-(2-chloro-3,3,3-trifluoro-1-propenyl)-2,2dimethyl-, cyano(2-nitrophenyl)methyl ester, [1R[1.alpha.(R*),3.alpha.(E)]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.

RN 121950-25-2 CAPLUS
CN Cyclopropanecarboxylic acid,
3-(2-chloro-3,3,3-trifluoro-1-propenyl)-2,2dimethyl-, cyano(4-nitrophenyl)methyl ester, [1R[1.alpha.(R*),3.alpha.(E)]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Double bond geometry as shown.

L7 ANSWER 62 OF 139 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1989:533660 CAPLUS
DOCUMENT NUMBER: 111:133660
Cyclopropanediamines. 3. Fure diastereomers of 1,2-cyclopropanedicarboxylic acids and

derivatives AUTHOR(S):

Von der Saal, Wolfgang; Reinhardt, Robert; Seidenspinner, Hubert Matthias; Stawitz, Josef;

Quast,

Helmut Inst. Org. Chem., Univ. Wuerzburg, Wuerzburg, CORPORATE SOURCE: D-8700,

D-8700,

Fed. Rep. Ger.

SOURCE: Liebigs Ann. Chem. (1989), (8), 703-12

CODEN: LACHDL; ISSN: 0170-2041

JOURNAL LANGUAGE: German

OTHER SOURCE(S): CASREACT 111:133660

AB Efficient prepns. of pure disastereomers of di-Me 1,2cyclopropanedicarboxylates, dicarboxylic acids, dicarbonyl

dichlorides,

and dihydrazides are reported. Mixts. of diastereomers of di-Me dicarboxylates are obtained from .alpha.,.beta.-unsatd. Me

carboxylates are usualities carboxylates as well as from RCH:CHCO2Me (R =

and Me2S+C-HCO2Me. The diastereomers are sepd. by fractionating

ns. or crystn. on a 100 g to 1 kg scale (d.e. .gtoreq.99%). 3,3-Dimethyl-cis-1,2-cyclopropanedicarboxylic acid is obtained by

.,...metuya-cis-1,2-cyclopropanedicarboxylic acid is obtained by
trans
.fwdarw. cis isomerization with the help of Ac20 and AcONa as
catalyst. Derivs. of cis-1,2-dimethyl-1,2cyclopropanedicarboxylic acid tend to form bicyclic products.

II 696-74-29 697-48-3P 699-49-0P
336-67-8P 1740-84-7P 16501-23-3P
13952-64-6P 13952-66-0P 119908-66-4P
119908-65-5P 13908-66-65 119945-23-2P
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
(prepn. and spectra of)
RN 696-74-2 CAPLUS
CN 1,2-Cyclopropanedicarboxylic acid, (1R,25)-rel- (9CI) (CA INDEX
NAME)

Relative stereochemistry.

RN 697-48-3 CAPLUS CN 1,2-Cyclopropanedicarboxylic acid, 1-methyl-, cis- (8CI, 9CI) (CA INDEX NAME)

ANSWER 61 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

IT 121950-26-3P
RL: SPN (Synthetic preparation), PREF (Preparation)
(prepn. of)
RN 121950-26-3 CAPLUS
CN Benzeneacetic acid,
.alpha.-[[[3-(2-chloro-3,3,3-trifluoro-1-propenyl)-2,2-dimethylcyclopropyl]carbonyl]oxyl-4-methoxy-, methyl ester,
[1R-[1.alpha.(R*),3.alpha.(E)]]- (SCI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.

L7 ANSWER 62 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued) Relative stereochemistry.

699-49-0 CAPLUS 1,2-Cyclopropanedicarboxylic acid, 1,2-dimethyl-, cis- (8CI, 9CI) (CA INDEX NAME)

Relative stereochemistry.

936-87-8 CAPLUS 1,2-Cyclopropanedicarboxylic acid, 3,3-dimethyl-, cis- (8CI, 9CI) (CA INDEX NAME)

Relative stereochemistry.

1740-84-7 CAPLUS
1,2-Cyclopropanedicarboxylic acid, 3,3-dimethyl-, trans- (8CI, 9CI)

INDEX NAME)

Relative stereochemistry.

16601-23-3 CAPLUS

1,2-Cyclopropanedicarboxylic acid, 3,3-dimethyl-, dimethyl ester, (1R,2R)-rel- (9CI) (CA INDEX NAME)

RN 19952-64-8 CAPLUS CN 1,2-Cyclopropanedicarboxylic acid, 3-phenyl-, (1.alpha.,2.alpha.,3.beta.)-(9C1) (CA INDEX NAME)

Relative stereochemistry.

RN 19952-66-0 CAPLUS CN 1,2-Cyclopropanedicarboxylic acid, 3-phenyl-, (1.alpha.,2.beta.3,alpha.)-(9C1) (CA INDEX NAME)

Relative stereochemistry.

119908-64-4 CAPLUS
1,2-Cyclopropanedicarboxylic acid, dipotassium salt, cis- (9CI) (CA INDEX NAME)

Relative stereochemistry.

●2 K

ANSWER 62 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued) 119908-77-9 CAPLUS Cyclopropanecarboxylic acid, 2-(chlorocarbonyl)-1,2-dimethyl-, cis-

(CA INDEX NAME) Relative stereochemistry.

702-91-0P 702-92-1P 826-34-6P 826-35-7P 6914-70-1P 6914-83-6P 14661-79-1P 19952-65-9P 20098-66-2P 28363-79-3P IT zes63-79-3P
RL: SPN (Synthetic preparation); PREP (Preparation) (prepn., spectra, and reactions of) 702-91-0 CAPLUS

1,2-Cyclopropanedicarboxylic acid, 1-methyl-, dimethyl ester, cis-9CI) (CA INDEX NAME)

Relative stereochemistry.

702-92-1 CAPLUS 1,2-Cyclopropanedicarboxylic acid, 1-methyl-, dimethyl ester, trans-CN (8CI, 9CI) (CA INDEX NAME)

Relative stereochemistry.

RN 826-34-6 CAPLUS CN 1.2-Cyclopropanedicarboxylic acid, dimethyl ester, $\{1R,2S\}$ -rel-(9CI) (CA INDEX NAME)

Relative stereochemistry.

L7 ANSWER 62 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued) 119908-65-5 CAPLUS
1,2-Cyclopropanedicarboxylic acid, 1-methyl-, dipotassium salt, cis-(9CI) (CA INDEX NAME)

Relative stereochemistry.

●2 K

119908-66-6 CAPLUS 1,2-Cyclopropanedicarboxylic acid, 1,2-dimethyl-, dipotassium salt, (9CI) (CA INDEX NAME)

Relative stereochemistry.

●2 K

119945-23-2 CAPLUS
1,2-Cyclopropanedicarboxylic acid, 3-phenyl-, dipotassium salt,
(1.alpha.,2.beta.,3.alpha.)- (9CI) (CA INDEX NAME)

Relative stereochemistry.

●2 K

119908-77-9P
RL: SPN (Synthetic preparation); PREP (Preparation) (prepn. of)

L7 ANSWER 62 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

826-35-7 CAPLUS 1,2-Cyclopropanedicarboxylic acid, dimethyl ester, (1R,2R)-rel- (9CI) INDEX NAME)

Relative stereochemistry

6914-70-1 CAPLUS
1,2-Cyclopropanedicarboxylic acid, 1,2-dimethyl-, dimethyl ester, cis(8C1, 9C1) (CA INDEX NAME)

Relative stereochemistry.

6914-83-6 CAPLUS 1,2-Cyclopropanedicarboxylic acid, 1,2-dimethyl-, dimethyl ester, (8CI, 9CI) (CA INDEX NAME)

Relative stereochemistry.

14661-79-1 CAPLUS 1,2-Cyclopropanedicarboxylic acid, 3-methyl-, dimethyl ester, (1.alpha.,2.alpha.,3.beta.)- (9CI) (CA INDEX NAME)

19952-65-9 CAPLUS 1,2-Cyclopropanedicarboxylic acid, 3-phenyl-, dimethyl ester, (1.alpha.,2.alpha.,3.beta.)- (9CI) (CA INDEX NAME)

Relative stereochemistry.

20098-66-2 CAPLUS 1,2-Cyclopropanedicarboxylic acid, 3-phenyl-, dimethyl ester, (1.alpha.,2.beta.,3.alpha.)- (9CI) (CA INDEX NAME)

Relative stereochemistry.

RN 28363-79-3 CAPLUS CN 1,2-Cyclopropanedicarboxylic acid, 3-methyl-, dimethyl ester, (IR, ZR)-rel-28363-79-3 CAPLUS (9CI) (CA INDEX NAME)

Relative stereochemistry.

L7 ANSWER 63 OF 139 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1989:492323 CAPLUS
DOCUMENT NUMBER: 111:92323
TITLE: carboxylates Preparation of (ortho-substituted)benzyl

INVENTOR(S):

as fungicides
Schuetz, Franz; Sauter, Hubert; Schirmer, Ulrich;
Wolf, Bernd; Ammermann, Eberhard; Pommer, Ernst
Heinrich, Fed. Rep. Ger.
BASF A.-G., Fed. Rep. Ger.
Bur. Pat. Appl., 31 pp.
CODEM: EPXXDW
Patent
German
1 PATENT ASSIGNEE(S): SOURCE:

DOCUMENT TYPE: LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	A1		EP 1988-116173	19880930
EP 310954	В1	19901122		
R: AT, BE,	CH, DE	, ES, FR, G	B, GR, IT, LI, NL, SE	
DE 3733870	A1	19890427	DE 1987-3733870	19871007
IL 87825	A1	19920329	IL 1988-87825	19880920
CA 1315277	A1	19930330	CA 1988-578569	19880927
AT 58522	E	19901215	AT 1988-116173	19880930
DD 274557	A5	19891227	DD 1988-320449	19881004
JP 01128959	A2	19890522	JP 1988-250043	19881005
AU 8823464	A1	19890413	AU 1988-23464	19881006
AU 611485	B2	19910613		
HU 49562	A2	19891030	HU 1988-5186	19881006
HU 200587	В	19900728		
ZA 8807493	A	19900627	ZA 1988-7493	19881006
CZ 283689	B6	19980617	CZ 1988-6663	19881006
US 4952720	A	19900828	US 1988-254696	19881007
PRIORITY APPLN. INFO.	. :		DE 1987-3733870	19871007
			EP 1988-116173	19880930
OTHER SOURCE(S):	CA	SREACT 111:	92323; MARPAT 111:923	
GT				

AB The title compds. I [R1 = alkoxy, alkylthio, halo, NH2, alkylamino, R2 = alkowycarbonyl, CN, CONH2; R3 = H, halo, CN, (un) substituted aryl or arylowy, etc.; X = alkylene, haloalkylene, hydroxyalkylene; n = 0, arylowy, etc.; X = alkylene, haloalkylene, hydroxyalkylene; n = 0, 1] are fungicides, prepd. by the reaction of the corresponding benzyl bromide II with a alkali metal, alk. earth metal or ammonium salt of R3XnCO2H in a

L7 ANSWER 62 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

ANSWER 63 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued) solvent, optionally in the presence of a catalyst. BrOH was converted into the K salt by treatment with KORI in EtOH, followed by reaction with II (RI = OMe, RZ = COZMe) in DMF, to give Me.alpha.-(2-benzoyloxymethylphenyl)-.beta.-methoxyacrylate. (E)-I [R1

OMe, R2 = CO2Me, R3 = H, Xn = (CH2)4CHMeCH2] (III) (0.025%) controlled Puccinia recondita on wheat, in pot expts. A formulation comprised

20. Ca dodecylbenzenesulfonate 2, fatty alc. polyglycol ether 8, phenolsulfonic acid-urea-formaldehyde condensate 2, and paraffinic mineral cil 684 by wt.

IT 122143-19-59

RL: RCT (Reactant); SPN (Synthetic preparation); FREP (Preparation) (prepn. and reaction of, with acrylic acid deriv.)

RN 122143-19-5 CAPLUS

CN Cyclopropanecarboxylic acid, 1-(2-chlorophenyl)- (9CI) (CA INDEX NAME)

122143-89-9P
RL: AGR (Agricultural use); BAC (Biological activity or effector,

RI: AGR (Agricultura: Use); Emc (plotoglob leading); PREP (Preparation); USES (Uses) (prepn. of, as agrochem. fungicide)
RN 122143-89-9 CAPLUS
CN Cyclopropanecarboxylic acid, 1-methyl-, [2-(1-cyano-2-methoxyethenyl)phenyl]methyl ester, (Z) - (9CI) (CA INDEX NAME)

Double bond geometry as shown.

ANSWER 63 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued) 122168-52-99 RM: AGR (Agricultural use); BAC (Biological activity or effector,

RI: AGR (Agricultural use); BAC (Blological activity of secret except adverse); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses) (preph. of, as fungicide) RN 122143-17-3 CAPLUS CN Benzeneacetic acid, 2-[[[[1-(2-chlorophenyl)cyclopropyl]carbonyl]oxy]methy 1]-.alpha.-(methoxymethylene)-, methyl ester (9CI) (CA INDEX NAME)

122143-29-7 CAPLUS
Benzeneacetic acid, 2-{[(cyclopropylcarbonyl)oxy]methyl]-.alpha.(methoxymethylene)-, methyl ester, (E)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

122143-60-6 CAPLUS Benzeneacetic acid, 2-[[[[2,2-dimethyl-3-(2-methyl-1-

propenyl)cyclopropyl]carbonyl]oxy]methyl]-.alpha.-(methoxymethylene)-,
 methyl ester (9CI) (CA INDEX NAME)

122143-61-7 CAPLUS
Benzeneacetic acid, 2-{[[{3-(2,2-dichloroethenyl)-2,2-

ANSWER 63 OF 139 CAPLUS COPYRIGHT 2002 ACS

122143-77-5 CAPLUS

Benzeneacetic acid, .alpha.-(methoxymethylene)-2-[[[{1-methylcyclopropyl)carbonyl]oxy]methyl]-, methyl ester, (E)- (9CI) (CA

INDEX NAME)

Double bond geometry as shown.

122143-78-6 CAPLUS
Benzeneacetic acid, .alpha.-(methoxymethylene)-2-[[[{2-methylcyclopropyl)carbonyl]cxy]methyl}-, methyl ester (9CI) (CA

RN 122143-79-7 CAPLUS
CN Benzeneacetic acid,
2[[(2,2-dichlorocyclopropyl)carbonyl]oxy]methyl].alpha.-(methoxymethylene)-, methyl ester, (E)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

ANSWER 63 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued) dimethylcyclorpopyl[carbonyl] oxy]methyl]-.alpha.-(methowymethylene)-, methyl est (9CI) (CA INDEX NAME)

122143-62-8 CAPLUS
Benzeneacetic acid, 2-[[[[3-(2,2-dibromoetheny1)-2,2-dimethylcyclopropy1]carbony1]cxy]methy1]-.alpha.-(methoxymethylene)-,methy1 ester (9CI) (CA INDEX NAME)

122143-63-9 CAPLUS
Benzeneacetic acid, 2-[[[[3-(2-chloro-3,3,3-trifluoro-1-propenyl)-2,2-dimethylcyclopropyl]carbonyl]cxy]methyl]-.alpha.-(methoxymethylene)-, methyl ester (9CI) (CA INDEX NAME)

$$\begin{array}{c} \text{He} & \text{He} & \text{Me MeO-C-C-C} \\ \text{C1} & \text{C3-C-C-CH} \\ \text{F}_3\text{C-C-CH} & \text{C1} \\ \end{array}$$

RN 122143-64-0 CAPLUS
CN Benzeneacetic acid,
2-[[[(2,2-dichloro-3,3-dimethylcyclopropyl)carbonyl]ox
y|methyl|-.alpha.-(methoxymethylene)-, methyl ester, (E)- (9CI) (CA

NAME)

Double bond geometry as shown.

ANSWER 63 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

RN 122143-80-0 CAPLUS

Senzeneacetic acid,
2-[[([2,2-dichloro-1-methylcyclopropy1)carbony1]oxy]me
thyl]-.alpha.-(methoxymethylene)-, methyl ester, (E)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

122143-81-1 CAPLUS
Benzeneacetic acid, .alpha.-(methoxymethylene)-2-[[[(2-phenylcyclopropyl)carbonyl]oxy]methyl]-, methyl ester (9CI) (CA INDEX NAME)

RN 122143-82-2 CAPLUS
CN Benzeneacetic acid,
2-[[[[1-(2-chlorophenyl)cyclopropyl]carbonyl]oxy]methy
1]-.alpha.-(methoxymethylene)-, methyl ester, (E)- (9CI) (CA INDEX

Double bond geometry as shown.

RN 122143-83-3 CAPLUS
CN Benzeneacetic acid,
2-[[[[1-(3-chlorophenyl)cyclopropyl]carbonyl]oxy]methy
1-alpha.-(methoxymethylene)-, methyl ester, (E)- (9CI) (CA INDEX

Double bond geometry as shown.

122143-84-4 CAPLUS
Benzeneacetic acid, .alpha,-{methoxymethylene}-2-[[[[1-(4-methoxyphenyl)cyclopropyl]carbonyl]oxy]methyl}-, methyl ester, (E)-(CA INDEX NAME)

Double bond geometry as shown.

ANSWER 63 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

122168-52-9 CAPLUS
Cyclopropanecarboxylic acid, 1-{4-chlorophenyl}-, [2-[2-methoxy-1(methoxycarbonyl)ethenyl]phenyl]methyl ester, (E)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

L7 ANSWER 63 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

122143-85-5 CAPLUS
Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-,
[2-(1-cyano-2-methoxyethenyl)phenyl]methyl ester (9Cl) (CA INDEX

122143-87-7 CAPLUS Cyclopropanecarboxylic acid, 1-methyl-, [2-(1-cyano-2-methoxyethenyl)phenyl]methyl ester, (E)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

122168-51-8 CAPLUS Cyclopropanecarboxylic acid, 1-phenyl-, [2-[2-methoxy-1-(methoxycarbonyl)ethenyl]phenyl]methyl ester, (E)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1989:231927 CAPLUS
DOCUMENT NUMBER: 110:231927
ITILE: 4 Preparation of trans-chry

Preparation of trans-chrysanthemumic acid

as materials for pyrethroid insecticides Suzukamo, Gohfuy Sakito, Yojir Pukao, Masami Sumitomo Chemical Co., Ltd., Japan Jpn. Kokai Tokkyo Koho, 5 pp. CODEN: JKOXAF Patent INVENTOR(S):
PATENT ASSIGNEE(S):
SOURCE:

DOCUMENT TYPE: LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

Japanese 1

PATENT NO. KIND DATE APPLICATION NO. DATE JP 63275542 JP 06017334 OTHER SOURCE(S): GI 2 19881114 4 19940309 MARPAT 110:231927 JP 1987-109514 19870430

trans-I (R = H, C1-20 alkyl, cycloalkyl, aralkyl) are prepd. by isomerization of cis-I or its mixt, with trans-I with .gtoreq.1 Br compds.

selected from acyl bromides, bromosilanes, S-bromides, and N-bromides

the presence of peroxides or azo compds. A soln. of 5.0 g cis-I (R = H)

and AIBN in toluene was treated dropwise with a soln. of AcBr in

ANSWER 64 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

827-90-7P, trans-Chrysanthemumic acid 1802-02-4P
2259-14-5P
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of, as material for pyrethroid insecticides)
827-90-7 CAPLUS
1802-02-4 CAPLUS
Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2-methyl-1-propenyl)-, ΙT

RN RN CN ethyl

ester, (1R,3R)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

2259-14-5 CAPLUS Cyclopropanecarboxylic acid, 2,2-dimethyl-3-{2-methyl-1-propenyl}-, {1s,3s}- {9CI} (CA INDEX NAME)

L7 ANSWER 65 OF 139 CAPLUS COPYRIGHT 2002 ACS

L7 ANSWER 65 OF 139 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1989:213139 CAPLUS
DOCUMENT NUMBER: 110:213139
ITILE: Preparation of trans-chry
derivatives as

Preparation of trans-chrysanthemic acid

materials for insecticides
Suzukamo, Gohfu; Sakito, Yoji; Fukao, Masami
Sumitomo Chemical Co., Ltd., Japan
Jpn. Kokai Tokkyo Koho, 4 pp.
CODEN: JXXXAF
Patent
Japanese
1 INVENTOR(S): PATENT ASSIGNEE(S): SOURCE:

DOCUMENT TYPE: LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE JP 63267743 JP 07017564 OTHER SOURCE(S): A2 19881104 B4 19950301 MARPAT 110:213139 JP 1987-105788 19870427

AB The title derive, trans-I (R = H, Cl-20 alkyl, cycloalkyl, aralkyl) are

prepd. by isomerization of cis-I or its mixt. with trans-I with P bromides

in the presence or absence of azo compds. A soln. of 5.0 g cis-I $\{R$ = H)
and AlEN in toluene was treated dropwise with PBr3 at 80.degree.,
then the
mixt. was stirred for 30 min to give 4.8 g I (R = H) contg. 89.9%
trans-isomer.
IT 15259-78-6
RL: RCT (Reactant)
(isomerization of, phosphorus bromides in)
RN 15259-78-6 CAPLUS
IT 827-90-79, trans-Chrysanthemumic acid 1602-02-49
RL: SPN (Synthetic preparation), PREP (Preparation)
(prepn. of, as material for pyrethroid insecticides)
RN 827-90-7 CAPLUS
RN 1802-02-4 CAPLUS
CN Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2-methyl-1-propenyl)-,
ethyl

ester, (1R,3R)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

L7 ANSWER 66 OF 139 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1989:213139 CAPLUS
DOCUMENT NUMBER: 110:213139
TITLE: Preparation of trans-chrysanthemic acid materials for pyrethroid insecticides
Suzukamo, Gohfus Sakito, Yojir Fukao, Masami
Sumitomo Chemical Co., Ltd., Japan
Jpn. Kokai Tokkyo Koho, 4 pp.
COEDEN: JOKKAF
Patent
Japanese

INVENTOR(S): PATENT ASSIGNEE(S): SOURCE:

DOCUMENT TYPE:

FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

APPLICATION NO. DATE PATENT NO. KIND DATE JP 63267742 JP 06017333 OTHER SOURCE(S): GI 2 19881104 4 19940309 MARPAT 110:213138 A2 B4 JP 1987-100579 19870422

AB The title derivs. trans-I (R = H, C1-20 alkyl, cycloalkyl, aralkyl) are

prepd. by isomerization of cis-I or its mixt. with trans-I with Br in the

presence of peroxides or azo compds. A soln. of 2.0 g cis-I (R = H) and

Bz202 in toluene was treated dropwise with a soln. of Br in CCl4 over 20

min at 80.degree., then the mixt, was stirred for 20 min to give 1.87 g I

ΙT

(R = H) contg. 94.1% trans-isomer.
18259-78-6
RL: RCT (Reactant)
(isomerization of)
15259-78-6 CAPUS
827-90-7P, trans-Chrysanthemumic acid 1802-02-4P
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of, as material for pyrethroid insecticides)
827-90-7 CAPUS
1802-02-4 CAPUS

Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2-methyl-1-propenyl)-,

ester, (1R, 3R) -rel- (9CI) (CA INDEX NAME)

ANSWER 66 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

ANSWER 67 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued) with FBr3 with stirring at 20.degree. to give racemic I (R - H), t of which was converted to an isomeric mixt. of (+)-cis- 2.5, (-)-cis-(+)-trans- 47.0, and (-)-trans-I (R = 2-octyl) 48.04.

827-90-7P, trans-Chrysanthemic acid 1802-02-4P, Ethyl
trans-Chrysanthemate 4638-82-0P 26771-11-9P
41641-25-2P 41641-26-3P 120522-99-8P
120523-00-4P
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of, as insecticide intermediate)
827-90-7 CAPLUS
1802-02-4 CAPLUS
Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2-methyl-1-propenyl)-, ester, (1R,3R)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

4638-92-0 CAPLUS Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2-methyl-1-propenyl)-, (1R,3R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

26771-11-9 CAPLUS Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2-methyl-1-propenyl)-, (1R,3S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 41641-25-2 CAPLUS
CN Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2-methyl-1-propenyl)-, ethyl

L7 ANSWER 67 OF 139
ACCESSION NUMBER:
DOCUMENT NUMBER:
110:213127 CAPLUS
110:213127 CAPLUS
110:213127
ITILE:
Method for racemization of optically active chrysanthemic acid or its ester
Chrysanthemic acid or its ester
Suzukamo, Gohfur Sakito, Yojir Fukao, Masamir Hagiya,

PATENT ASSIGNEE(S):

Sumitomo Chemical Co., Ltd., Japan Eur. Pat. Appl., 12 pp. CODEN: EPXXDW SOURCE:

DOCUMENT TYPE: LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION: Patent English

PA'	TENT N	٥.		KIND	DATE		APP	LICATION 1	NO. I	DATE
	26182				19880330		EP	1987-3078	02 1	19870903
EP	26182	4		B1	19900509					
	R:	BE,	CH, I	E, FR,	GB, IT,	LI,	NL			
JP	63196	541		A2	19880815		JP	1987-28583	1 1	19870210
JP	06088	932		B4	19941109			-		
JP	63196	542		A2	19880815		JP	1987-2858:	2 1	19870210
	06047			B4	19940622					
	01006			A2	19890110		770	1987-1648		19870630
							JP	1387-1048	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	38 /0630
JP	07017	565		B4	19950301					
HU	44994			A2	19880530		HU	1987-3952	1	19870903
HU	20217	1		В	19910228					
US	47883	23		A	19881129		US	1987-9323	4 1	19870904
PRIORIT	Y APPL	N. I	NFO.:	:		31	P 198	6-208768	1	9860904
								7-28581		9870210
								7-28582		19870210
						J:	P 198	7-80791	1	19870331

JP 1987-80791 MARPAT 110:213127 OTHER SOURCE(S):

AB The racemization of optically active chrysanthemic acid or its ester I (R $_{\rm cr}$ $_{\rm cr}$...

= H, C1-20 alkyl, cycloalkyl, or aralkyl), is effected by contacting I with HBr or a P bromide. This method may also be effected in the

presence of a peroxide or azo compd. The method of the present invention can also be used for the conversion of racemic cis isomer or racemic mixt. of cis-

and trans-chyrsanthemic acid into the corresponding racemic trans-rich isomer. A mixt. of (+)-cis- 1.8, (-)-cis- 18.3, (+)-trans- 11.1, and (-)-trans-1 (R = H) 68.8%, PhMe, and Me3COOH under N was treated dropwise

ANSWER 67 OF 139 CAPLUS COPYRIGHT 2002 ACS ester, (1R,3R) - (9CI) (CA INDEX NAME) (Continued)

Absolute stereochemistry.

41641-26-3 CAPLUS Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2-methyl-1-propenyl)-, ester, (1R,3S) - (9CI) (CA INDEX NAME)

Absolute stereochemistry.

120522-99-8 CAPLUS Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2-methyl-1-propenyl)-, 1-methylheptyl ester, [1R-[1.alpha.(R*),3.alpha.]]- (9CI) (CA INDEX

Absolute stereochemistry

120523-00-4 CAPLUS
Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2-methyl-1-propenyl)-,
1-methylheptyl ester, [1R-[1.alpha.(R*),3.beta.]]- (9CI) (CA INDEX NAME)

120523-01-5F 120523-02-6F
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of, as intermediate for insecticides)
120523-01-5 CAPUS
Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2-methyl-1-propenyl)-,
1-methylheptyl ester, [1S-(1.alpha.(S*),3.alpha.]]- (9CI) (CA INDEX) NAME

Absolute stereochemistry.

120523-02-6 CAPLUS
Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2-methyl-1-propenyl)-,
1-methylheptyl ester, [15-[1.alpha.(5*),3.beta.]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

2259-14-5, (-)-trans-Chrysanthemic acid 15259-78-6, cis-Chrysanthemic acid 26771-06-2 RL: RCT (Reactant) (racemization of) 2259-14-5 CAPUS ΙT

Absolute stereochemistry.

Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2-methyl-1-propenyl)-, (1s,3s)- (9CI) (CA INDEX NAME)

ACCESSION NUMBER:

DOCUMENT NUMBER: TITLE:

ANSWER 68 OF 139 CAPLUS COPYRIGHT 2002 ACS
SSION NUMBER: 1989:131094 CAPLUS
HENT NUMBER: 110:213094 CAPLUS
LE: Convenient synthesis of chiral trans-2phenylcyclopropanecarboxylic acid
OR(S): Cho, Nam Sook; Shin, Dae Hyun; Lee, Chong Chul;
Do

AUTHOR(S): Ra, Do

Young Coll. Nat. Sci., Chungnam Natl. Univ., Chungnam, 302-764, S. Korea Bull. Korean Chem. Soc. (1988), 9(4), 195-8 CODEN: BKOSDE: 15SN: 0253-2964 CORPORATE SOURCE:

SOURCE:

CODEN: BKCSDE: ISSN: U233-2309

JOURNAL TYPE: Journal

LANGUAGE: English
AB (-)-(1R,2R) and (+)-(1S,2S)-menthyl

trans-2-phenylcyclopropanecarboxylates

have been synthesized with the aid of chiral Cu(II) complex

catalyst by the addn. reaction of 1-menthyl diazoacetate to

styrene. The yield was 75%, with the purity of trans isomer over

95% and

and
the optical purity of 95%.
10488-03-6F 23020-15-7P
RL: RCT (Reactant), PREP (Preparation)
(chiral synthesis of)
10488-03-6 CAPLUS
Cyclopropanecarboxylic acid, 2-phenyl-, methyl ester, (1R, ZR) - (9CI) RN CN (CA

INDEX NAME)

Absolute stereochemistry.

23020-15-7 CAPLUS
Cyclopropanecarboxylic acid, 2-phenyl-, (1S,2S)- (9CI) (CA INDEX

Absolute stereochemistry. Rotation (+).

105367-36-0P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation) (prepn. and ester hydrolysis of)
105367-36-0 CAPLUS
Cyclopropanecarboxylic acid, 2-phenyl-, (1R, 25, 5R)-5-methyl-2-(1-methylethyl) cyclohexyl ester, (15, 2S) - (9CI) (CA INDEX NAME)

ANSWER 67 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

15259-78-6 CAPLUS 26771-06-2 CAPLUS Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2-methyl-1-propenyl)-, (15,3R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L7 ANSWER 68 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued) Absolute stereochemistry.

IT

16205-72-4P
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)
16205-72-4 CAPLUS
Cyclopropanecarboxylic acid, 2-phenyl-, methyl ester, (1S,2S)- (9CI)

(CA INDEX NAME)

ANSWER 69 OF 139 CAPLUS COPYRIGHT 2002 ACS
SSION NUMBER: 1989:172716 CAPLUS
E: Semicorrin metal complexes as enantioselective
catalysts. Part 2. Enantioselective
cyclopropane formation from olefins with diazo
compounds catalyzed by chiral DOCUMENT NUMBER: TITLE:

(semicorrinato) copper

complexes
Fritschi, Hugor Leutenegger, Urs; Pfaltz, Andreas
Lab. Org. Chem., Eidg. Tech. Hochsch., Zurich,
CH-8092, Switz.
Helv. Chim. Acta (1988), 71(6), 1553-65
CODEN: HCACAV; ISSN: 0018-019X AUTHOR(S): CORPORATE SOURCE:

DOCUMENT TYPE:

LANGUAGE: OTHER SOURCE(S): AB Copper comp

MENT TYPE: Journal UNGE: English English R SOURCE(S): English CASPERCT 110:172716

Copper complexes of chiral, C2-sym. semicorrin ligands are efficient catalysts for the cyclopropane formation from olefins with diazo compds. In the presence of 1 mol-% of catalyst, alkyl diazoactates reacted smoothly with terminal olefins such as styrene, butadiene, and 1-heptene to give the corresponding optically active cyclopropanecarboxylic acid derivs. With one of the catalysts, enanticselectivities up to 97% ee were obtained. Usually, the tions

control electivities up to 97% ee were obtained. Usually, the reactions were carried out using bis(semicorrinato) copper(II) complexes as precatalysts. In order to produce active catalyst, these complexes had to be activated first by heating in the presence of diazoacetate or by treatment with phenylhydrazine. Expts. with (semicorrinato) copper(I) complexes, prepd. in situ from copper(I) tert-butoxide suggest that the actual catalyst is a [mono (semicorrinato)] copper(I).

IT 18220-3-9-29 120143-48-99 103367-41-79 120047-39-29 120143-48-99 (Synthetic preparation), PREP (Preparation) (prepn. and acid hydrolysis of)

RI RCT (Reactant). SFN (Synthetic preparation), PREP (Preparation) (SSS)-55-6 CAPLUS.

Cyclopropanearboxylic acid, 2-pentyl-, 5-methyl-2-(1-methylethyl) cyclohexyl ester, [IS-(1-alpha,(1R*,2R*,2),2.beta,5.alpha,]]
[IS-(1-alpha,(1R*,2R*,2),2.beta,5.alpha,]]-

Absolute stereochemistry.

(9CI) (CA INDEX NAME)

RN 105367-34-8 CAPLUS
CN Cyclopropanecarboxylic acid, 2-phenyl-, 1,1-dimethylethyl ester, (15,25)-

ANSWER 69 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

23020-15-7P 23020-18-0P
RL: RCT (Reactant); SPN (Synthetic preparation); PREF (Preparation) (prepn. and esterification of) 23020-15-7 CAPLUS
Cyclopropanecarboxylic acid, 2-phenyl-, (1S,2S)- (9CI) (CA INDEX

CN NAME)

Absolute stereochemistry. Rotation (+).

23020-18-0 CAPLUS Cyclopropanecarboxylic acid, 2-phenyl-, {15,2R}- (9CI) (CA INDEX CN NAME)

Absolute stereochemistry.

120143-47-7F 120143-48-8P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation) (prepn. and esterification of, with octanol) 120143-47-7 CAPLUS

Cyclopropanecarboxylic acid, 2-pentyl-, (15-trans)- (9CI) (CA INDEX CN NAME)

Absolute stereochemistry.

120143-48-8 CAPLUS Cyclopropanecarboxylic acid, 2-pentyl-, (1S-cis)- (9CI) (CA INDEX

L7 ANSWER 69 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

Absolute stereochemistry. Rotation (+).

RN 105367-41-7 CAPLUS
CN Cyclopropanecarboxylic acid, 2-pentyl-, 5-methyl-2-(1-methylethyl)cyclohexyl ester,
[Is-[1.alpha.[R*, 25*), 2.beta., 5.alpha.]](9CI) (CA INDEX NAME)

Absolute stereochemistry.

120047-37-2 CAPLUS
Cyclopropanecarboxylic acid, 2-(2-methyl-1-propenyl)-,
5-methyl-2-(1-methylethyl)cyclohexyl ester, [15[1.alpha.(R*,2s*),2.beta.,5.alpha.])- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

120143-42-2 CAPLUS
Cyclopropanecarboxylic acid, 2-(2-methyl-1-propenyl)-,
5-methyl-2-(1-methylethyl)cyclohexyl ester, [15[1.alpha. (1R*,2R*),2.beta.,5.alpha.]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

ANSWER 69 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued) Absolute stereochemistry.

16205-72-4P 34703-00-9P 34716-60-4P 53187-86-3P 67528-63-6P 77210-35-6P 103251-34-5P 105367-35-9P 103367-36-9P 103367-37-1P 105367-37-1P 105367-39-3P 105367-39-3P 105367-40-6P 120047-39-3P 120047-39-4P 120143-36-6P 120143-39-3P 120143-41-1P 120143-46-6P 120143-44-4P 120143-45-5P 120143-46-6P 120143-44-4P 120143-50-2P 120143-51-3P RL: SPN (Synthetic preparation); PREP (Preparation) (prepn. of)

(prepn. of) 16205-72-4 CAPLUS Cyclopropanecarboxylic acid, 2-phenyl-, methyl ester, (1S,2S)- (9CI)

INDEX NAME)

34703-00-9 CAPLUS Cyclopropanecarboxylic acid, 2-phenyl-, ethyl ester, (15,2R)- (9CI)

INDEX NAME)

Absolute stereochemistry. Rotation (+).

34716-60-4 CAPLUS Cyclopropanecarboxylic acid, 2-phenyl-, ethyl ester, (1R,2R)- (9CI)

INDEX NAME)

Absolute stereochemistry. Rotation (-).

53187-86-3 CAPLUS Cyclopropanecarboxylic acid, 2-(2-methyl-1-propenyl)-, methyl ester, (15-trans)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 67528-63-6 CAPLUS CN Cyclopropanecarboxylic acid, 2-phenyl-, methyl ester, (15-cis)-(9CI) (CA INDEX NAME)

RN 77210-35-6 CAPLUS CN Cyclopropanecarboxylic acid, 2-ethenyl-, (1S,2R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

RN 105251-54-5 CAPLUS
CN Cyclopropanecarboxylic acid, 2-ethenyl-, 5-methyl-2-(1-methylethyl) cyclohexyl ester,
[18-[1.alpha.(18*,25*),2.beta.,5.alpha.]][9CI) (CA INDEX NAME)

Absolute stereochemistry.

ANSWER 69 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued) methylethyl)cyclohexyl ester, (1S,2S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

105367-39-3 CAPLUS
Cyclopropanecarboxylic acid, 2-phenyl-, (15,2R,5S)-5-methyl-2-(1methylethyl)cyclohexyl ester, (1S,2R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 105367-40-6 CAPLUS CN Cyclopropaneoarboxylic acid, 2-ethenyl-, 5-methyl-2-(1-methylethyl)cyclohenyl ester, [18-[1.alpha.(1R*,2R*),2.beta.,5.alpha.]}-(9CI) (CA INDEX NAME)

Absolute stereochemistry.

120047-38-3 CAPLUS Cyclopropanecarboxylic acid, 2-pentyl-, methyl ester, (1S-trans)-(CA INDEX NAME)

Absolute stereochemistry.

L7 ANSWER 69 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

105367-35-9 CAPLUS Cyclopropanecarboxylic acid, 2-phenyl-, 1,1-dimethylethyl ester, (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

105367-36-0 CAPLUS Cyclopropanecarboxylic acid, 2-phenyl-, (1R,2S,5R)-5-methyl-2-(1-methylethyl)cyclohexyl ester, (1S,2S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

105367-37-1 CAPLUS Cyclopropanecarboxylic acid, 2-phenyl-, (1R,2S,5R)-5-methyl-2-(1-methylethyl)cyclohexyl ester, (1S,2R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

105367-38-2 CAPLUS Cyclopropanecarboxylic acid, 2-phenyl-, (1s,2R,5s)-5-methyl-2-(1-

L7 ANSWER 69 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

120047-39-4 CAPLUS Cyclopropanecarboxylic acid, 2-pentyl-, 1-methylheptyl ester, [15-[1.alpha.(R*),2.alpha.]]- (9CI) (CA INDEX NAME)

120143-38-6 CAPLUS Cyclopropanecarboxylic acid, 2-phenyl-, (1s,2R,5s)-5-methyl-2-(1-methylethyl)cyclohexyl ester, (1R,2s)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

120143-39-7 CAPLUS Cyclopropanecarboxylic acid, 2-phenyl-, (1s,2R,5s)-5-methyl-2-(1-methylethyl)cyclohexyl ester, (1R,2R)- (9CI) (CA INDEX NAME)

RN 120143-41-1 CAPLUS CN Cyclopropanecarboxylic acid, 2-ethenyl-, (15-ci#)- (9CI) (CA INDEX NAME)

120143-43-3 CAPLUS
Cyclopropanecarboxylic acid, 2-(2-methyl-1-propenyl)-,
5-methyl-2-(1-methylethyl)cyclohexyl ester, [1s[1.alpha.(1S*,2R*),2.beta.,5.alpha.]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

120143-44-4 CAPLUS
Cyclopropanecarboxylic acid, 2-(2-methyl-1-propenyl)-,
5-methyl-2-(1-methylethyl)cyclohexyl ester, [1s[1.alpha.(1S*,2S*),2.beta.,5.alpha.])- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

120143-45-5 CAPLUS Cyclopropanecarboxylic acid, 2-(2-methyl-1-propenyl)-, methyl ester, (15-cis)- (9C1) (CA INDEX NAME)

Absolute stereochemistry.

RN 120143-46-6 CAPLUS CN Cyclopropanecarboxylic acid, 2-pentyl-, methyl ester, (1S-cis)-(9CI) (CA INDEX NAME)

L7 ANSWER 70 OF 139 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1989:1355.29 CAPLUS
DOCUMENT NUMBER: 110:1355.29
Hethod for racemization of optically active chrysanthemic acid or its esters
SUZUKARO, Gohfur Sakito, Yojir Fukao, Masami Suzukaro, Gohfur Sakito, Yojir Fukao, Masami Suzukaro, Fat. Appl., 11 pp.
CODEN: EPXXDW

DOCUMENT TYPE: 1

DOCUMENT TYPE: LANGUAGE:

FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

PATENT NO.	KIND	DATE	API	PLICATION NO.	DATE
EP 282221	A2	19880914	EP	1988-301792	19880301
EP 282221	A3	19880921			
EP 282221	B1	19920115			
R: BE, CH,		, GB, IT, LI,	NL		
JP 63218641	A2	19880912	JP	1987-53519	19870309
JP 05086941	B4	19931214			
JP 63238037	A2	19881004	JP	1987-73355	19870326
JP 05087057	B4	19931215			
HU 46879	A2	19881228	HU	1988-1122	19880308
HU 203067	В	19910528			
US 4820864	Ā		US	1988-166014	19880309
JP 01258638	A2	19891016	JP	1988-141175	19880607
JP 06088935	B4	19941109			
PRIORITY APPLN. INFO.	:		JP 198	37-53519	19870309
			JP 198	37-73355	19870326
			JP 198	37-145467	19870610
			JP 198	37-306917	19871203
OTHER SOURCE(S):	CA	SREACT 110:13	55291	MARPAT 110:13	

AB The title compds. (I, R = H, C1-ZU aikyı, compd.)

were racemized by contacting them with .gtoreq.1 of the following: a carboxylic acid bromide, a Si bromide, an S-bromine compd., and N-bromine compd., a halobromine compd., or a mercaptan, and in the presence of azo compd. or peroxide. In manuf. of pyrethroid insecticides the

esters have higher insecticidal activity than the cis forms, and the (+) forms have exceedingly higher activity than the corresponding (-)

L7 ANSWER 69 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

Absolute stereochemistry.

120143-49-9 CAPLUS Cyclopropanecarboxylic acid, 2-pentyl-, 1-methylheptyl ester, [1s-[1.alpha.(R*),2.beta.]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

120143-50-2 CAPLUS Cyclopropanecarboxylic acid, 2-pentyl-, 1-methylheptyl ester, [1R-[1.alpha.(S*),2.alpha.]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

120143-51-3 CAPLUS Cyclopropanecarboxylic acid, 2-pentyl-, 1-methylheptyl ester, [1R-[1.alpha.(S*),2.beta.]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

ANSWER 70 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued) (no data). I (R = H) (10.0 g), comprising (+)-cis-1.8, (-)-cis-

17.6,
(+)-trans- 10.1, and (-)-trans- 70.5%, and 97 mg
azobisisobutyronitrile
were dissolved in 20 mL PhMe and 0.48 g Br in CCl4 was added dropwise

15 min at 80.degree. to give 8.73 g of a product mixt. of I (R = H) comprising (+)-cis-3.1, (-)-cis-3.2, (+)-trans-44.5, and (-)-trans-49.2%.
26771-06-2P 26771-11-9P
RL: FORM (Formation, nonpreparative); PREP (Preparation)
(Formation of, in racemization of chrysanthemate stereoisomer)
26771-06-2 CAPUS
Cyclopropamecarboxylic acid, 2,2-dimethyl-3-(2-methyl-1-propenyl)-,
(15,3R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

26771-11-9 CAPLUS Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2-methyl-1-propenyl)-, (1R,3S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

ΙT 119479-62-8P

119479-62-8P
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)
119479-62-8 CAPLUS
Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2-methyl-1-propenyl)-,
1-methylheptyl ester (9CI) (CA INDEX NAME)

827-90-7P 1802-02-4P 4638-92-0P 27335-32-6P 41641-25-2P

ANSWER 70 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)
RL: SFN (Synthetic preparation), PREF (Preparation)
(prepn. of, by racemization of stereoisomer, catalysts for)
827-90-7 CAPLUS
1802-02-4 CAPLUS
Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2-methyl-1-propenyl)-, ethyl ester, (1R,3R)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

مونیت بلادی (vyclopropanecarboxylic acid, 2,2-dimethyl-3-(2-methyl-1-propenyl)-, (IR,3R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

RN 27335-32-6 CAPLUS CN Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2-methyl-1-propenyl)-, methyl ester, (1R,3R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

41641-25-2 CAPLUS Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2-methyl-1-propenyl)-, ethyl ester, (1R,3R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L7 ANSWER 71 OF 139 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1989:7640 CAPLUS
DCCUMENT NUMBER: 110:7640 CAPLUS
TITLE: Regio=elective catalytic addition of proton donors to

1-alkyl-3-cyclopropenecarboxylates. 2. Catalytic reaction of methyl esters of 1-alkyl-3-cyclopropenecarboxylates with hydrogen halides and

AUTHOR (S):

carboxylic acids Shapiro, E. A.; Protopopova, M. N.; Nefedov, O. CORPORATE SOURCE:

Inst. Org. Khim. im. Zelinskogo, Moscow, USSR Izv. Akad. Nauk SSSR, Ser. Khim. (1988), (4), SOURCE:

CODEN: IASKA6; ISSN: 0002-3353 DOCUMENT TYPE:

LANGUAGE: OTHER SOURCE(S):

Journal Russian CASREACT 110:7640

AB Title compds. I [R = Me, Pr, H(CH2)5] reacted with HX (X = C1, Br) to give (E) - and (Z)-XCH:CRCH2CO2Me, while HF, F3CCO2H, Cl3CCO2H, and Cl2CHCO2H

to, and (a)-XCH:CRCH2CO2Me, while HF, F3CCO2H, C13CCO2H, and C12CHCO2H
reacted with I to give furans II, without addn. The weaker acids R1CO2H
(RI = H, C1CH2, vinyl, Me) gave (E)- and (2)-R1CO2CH:CRCH2CO2Me.
IT \$5701-05-6
RL: RCT (Reactant)
(cleavage-addn. reaction of, with Me
methylcyclopropenecarboxylate)
RN \$5701-05-8 CAPLUS
CN Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-(9CI)
(CCA INDEX NAME)

(CA INDEX NAME)

117780-74-2P
RL: SPN (Synthetic preparation); PREP (Preparation) (prepn. of)

L7 ANSWER 70 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

IT

2239-14-5 CAPUS Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2-methyl-1-propenyl)-, (15,35)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

15259-78-6 CAPLUS

ANSWER 71 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued) 117780-74-2 CAPLUS Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-,4-methcvy-2-methyl-4-oxo-1-butenyl ester (9CI) (CA INDEX NAME)

ANSWER 72 OF 139 CAPLUS COPYRIGHT 2002 ACS SSION NUMBER: 1988:525190 CAPLUS MENT NUMBER: 109:125190 ACCESSION NUMBER: DOCUMENT NUMBER: TITLE: On the biosynthesis of ethylene: further evidence for stepwise enzymic cyclopropane ring cleavage Baldwin, Jack E.; Adlington, Robert M.; Lajoie, AUTHOR(S): Gilles A.; Lowe, Christopher; Baird, Pete D.; Prout, Keith CORPORATE SOURCE: Dyson Perrins Lab., Univ. Oxford, Oxford, OX1 3QY, UK SOURCE: J. Chem. Soc., Chem. Commun. (1988), (12), 775-7 CODEN: JCCCAT; ISSN: 0022-4936 DOCUMENT TYPE: Journal DOCUMENT LIFE.

LANGUAGE: English

OTHER SOURCE(s): CASREACT 109:125190

AB The conversion of a series of 2,3-dimethylated 1aminocyclopropanecarboxylates by apple tissues into mixts. of cistrans-butenes is reported; the results are in accord with a stepwise enzymic mechanism of cyclopropane ring opening. The results support the view that ethylene synthetase operates via a stepwise and homolytic mechanism in which active site topol. directs the stereochem. course of the process.
116498-04-5P
RL: RCT (Reactant); PREP (Preparation)
(prepn. and hydrolysis and amination of)
116498-04-5 CAPLUS
1,1-Cyclopropanedicarboxylic acid, 2,3-dimethyl-, monomethyl ester,
(1.alpha.,2.alpha.,3.beta.)- (9CI) (CA INDEX NAME) ΙŤ Relative stereochemistry.

24506-42-1P 116498-03-4P
RL: RCT (Reactant), PREP (Preparation)
(prepn. and hydrolysis of)
24506-42-1 CAPLUS
1,1-Cyclopropanedicarboxylic acid, 2,3-dimethyl-, dimethyl ester, IT

(8CI, 9CI) (CA INDEX NAME)

Relative stereochemistry.

L7 ANSWER 73 OF 139 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1998:437522 CAPLUS
DOCUMENT NUMBER: 109:37522
TITLE: Carbon-13 labeling study of the coenzyme
B12-dependent

B12-dependent methylitaconate .dblarw.
.alpha.-methyleneglutarate model rearrangement reaction and examination of potential cyclopropane intermediates
AUTHOR(S): Dowd, Paul, Hershline, Roger
CORPORATE SOURCE: Dep. Chem., Univ. Pittsburgh, Pittsburgh, PA, 15260,

AUTHOR(S): CORPORATE SOURCE: 15260,

SOURCE:

USA J. Chem. Soc., Perkin Trans. 2 (1988), (1), 61-70 CODEN: JCPKBH; ISSN: 0300-9580 Journal English

DOCUMENT TYPE: LANGUAGE:

CASREACT 109:37522 OTHER SOURCE(S):

CO2R Δ CH2R1 I

AB The model rearrangement mimicking the coenzyme B12-dependent, enzyme-catalyzed interconversion of .alpha.-methyleneglutaric acid with

methylitaconic acid has been carried out with a carbon-13 label. This

expt. demonstrates beyond doubt that the acrylate group is the migrating

ating group in the model, as it is in the enzyme-catalyzed rearrangement. Expts. designed to probe the possible occurrence of cyclopropylmethyl intermediates in the model rearrangement are also described. To this end

the cis- and trans-bromomethylcyclopropanediacids (I; R = H, R1 = Br) were

prepd. An extensive series of expts. involving treatment of the

acids their Me and tetrahydropyranyl esters with vitamin B12s was carried

out.
No methylitaconic acid could be detected in any of the reaction

However, .alpha.-methyleneglutaric acid and methylglutaconic acid

were obsd. as the reaction products. cis-I (R = Me; R1 = OTs, I) were

also

examd. and yielded results analogous to those obtained with the bromides. IT 114444-54-1P

RL: RCT (Reactant): SPN (Synthetic preparation): PREP (Preparation) (prepn. and bromination of)

L7 ANSWER 72 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

116498-03-4 CAPLUS 1,1-Cyclopropanedicarboxylic acid, 2,3-dimethyl-, dimethyl ester, (25-trans)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

ΙŤ

116381-04-5P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)

(prepn. and reactions of)
116381-04-5 CAPLUS
1,1-Cyclopropanedicarboxylic acid, 2,3-dimethyl-, monomethyl ester,
(l.alpha.,2.alpha.,3.alpha.)- (9CI) (CA INDEX NAME)

Relative stereochemistry.

ANSWER 73 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued) 114644-54-1 CAPLUS

1,2-Cyclopropanedicarboxylic acid, 1-(hydroxymethyl)-, cis- (9CI) (CA INDEX NAME)

Relative stereochemistry.

114644-50-7P RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation) (preps. and esterification of) 114644-50-7 CAPLUS

1,2-Cyclopropanedicarboxylic acid, 1-(bromomethyl)-, trans- (9CI) (CA INDEX NAME)

Relative stereochemistry.

702-90-9P, 1,1,2-Cyclopropanetricarboxylic acid RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation) (preph. and lactonization of) 702-90-9 CAPLUS 1,1,2-Cyclopropanetricarboxylic acid (6CI, 7CI, 8CI, 9CI) (CA INDEX

114644-51-8P 114644-58-5P
RL: RCT (Reactant): SPM (Synthetic preparation): PREP (Preparation) (prepn. and reaction of, with vitamin B12s)
114644-51-8 CAPUS
1,2-Cyclopropanadicarboxylic acid, 1-(bromomethyl)-, dimethyl ester, trans- (9CI) (CA INDEX NAME)

ANSWER 73 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

114644-58-5 CAPLUS 1,2-Cyclopropanedicarboxylic acid, 1-(iodomethyl)-, dimethyl ester, cis-(9CI) (CA INDEX NAME)

Relative stereochemistry.

114644-53-OP RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation) (prepn. and redn. of) 114644-53-O CAPLUS 1.1,2-Cyclopropanetricarboxylic acid, 1-methyl ester, cis- (9CI) (CA INDEX NAME)

Relative stereochemistry.

114644-56-3P

RIE SPN (Synthetic preparation); PREP (Preparation)
(prepn., derivatization, and reaction of, with vitamin B12s)
11644-5-6-3 CAPLUS
1,2-Cyclopropanedicarboxylic acid, 1-(bromomethyl)-, dimethyl ester,

(9CI) (CA INDEX NAME)

Relative stereochemistry.

IT 114644-55-2P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation) (prepn., esterification, and reaction of, with vitamin B12s) 11644-55-2 CAPLUS

1,2-Cyclopropanedicarboxylic acid, 1-(bromomethyl)-, cis- (9CI) (CA INDEX NAME)

L7 ANSWER 74 OF 139 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1988:221334 CAPLUS
DOCUMENT NUMBER: 108:221334
TITLE: Hethod for racemization of chrysanthemic acid or its

esters using aluminum tribromide or boron tribromide

INVENTOR(S):

in the presence of azo compounds Suzukamo, Gohfu; Fukao, Masami Sumitomo Chemical Co., Ltd., Japan Eur. Pat. Appl., 7 pp. CODEN: EPXXDW PATENT ASSIGNEE(S): SOURCE:

DOCUMENT TYPE:

LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

PA	TENT	NO.		KIN	4D	DATE			AP	PLICATION NO.	DATE
				A1	l	1987	0909		EP	1987-300842	19870130
ΕP	235	940		В1	l	1990	0725				
	R:	BE,	CH,	DE,	FR,	GB,	IT,	LI,	NL		
JP	621	98643		A2	2	1987	0902		JP	1986-43442	19860227
JP	050	86775		B	1	1993	1214				
US	472	3035		A		1988	0202		US	1987-10416	19870203
HU	439	93		A2	2	1988	0128		HU	1987-760	19870226
ΗU	201	293		В		1990	1028				
RIT	Y AP	PLN.	INFO.	. :					JP 19	6-43442	19860227
R 5	OURC	E(S):			CAS	REAC	T 10	8:22	1334		
	EP EP JP JP US HU HU	EP 235 EP 235 R: JP 621 JP 0500 US 472 HU 439 HU 201 RITY AP	JP 62198643 JP 05086775 US 4723035 HU 43993 HU 201293 RITY APPLN.	EP 235940 EP 235940 R: BE, CH, JP 62198643 JP 05086775 US 4723035 HU 43993 HU 201293	EP 235940 A: EP 235940 B: R: BE, CH, DE, JP 62198643 A: JP 05086775 B: US 4722035 A: HU 43993 A: HU 201293 B RITY APPLN. INFO::	EF 235940 Al EF 235940 Bl R: BE, CH, DE, FR, JF 62198643 A2 JF 05086775 B4 US 4723035 A HU 43993 A2 HU 201293 B RITT APPLIN. INFO.:	EF 235940 Al 1987 EF 235940 Bl 1990 R: EE, CH, DE, FR, GB, JF 62198643 A2 1987 JF 05086775 B4 1993 US 4723035 A 1988 HU 43993 A2 1988 HU 43993 B 1990 RITY APPIN. INFO.:	EP 235940 A1 19870909 EP 235940 B1 19900725 R: EE, CH, DE, FR, GB, 17, JP 62198643 A2 19870902 JP 05086775 B4 19931214 US 4723035 A 19880202 HU 43993 A2 19880128 HU 201293 B 19901028 HUTY APPLN. INFO:	EF 235940 A1 19870909 EF 235940 B1 19900725 R: EE, CH, DE, FR, GB, IT, LI, JF 62198643 A2 19870902 JF 05086775 B4 19931214 US 4723035 A 19980202 HU 43993 A2 19880128 HU 201293 B 19901028 RHTY APPLN. INFO.:	EP 235940 Al 19870909 EP EP 235940 Bl 19900725 R: BE, CH, DE, FR, GB, IT, LI, NL JP 62198643 A2 19870902 JP 50506775 B4 19931214 US 4723035 A 19880202 US HU 43993 A2 19880128 HU 40 201293 B 19901028 HU ATTY APPIN. INFO:	EF 235940 A1 19870909 EP 1987-300842 EF 235940 B1 19900725 EF 235940 B1 19900725 IF EE, CH, DE, FR, GB, IT, LI, NL JF 62198643 A2 19870902 JF 1986-43442 JF 05086775 B4 19931214 US 4723035 A 19880202 US 1987-10416 HU 43993 A2 19880128 HU 1987-760 HU 201293 B 19901028 HUTY APPLN. INFO.: JF 1986-43442

AB Chrysanthemic acid and social (... aralkyl, cycloalkyl, alkylcycloalkyl, alkoxycycloalkyl) were racemized using cycloalkyl, alkylcycloalkyl, alkoxycycloalkyl) were racemized using (-1-cis-Chrysanthemic Chrysanthemic acid and esters (I; R = H, alkyl, cycloalkylalkyl,

Al bromides in the presence of an azo compd. (-)-cis-Chrysanthemic

acid, n-heptane, and (:NCMe2CN)2 were stirred at 80.degree. while BBr3 in n-heptane was added over 30 min. GC of the (+)-2-octyl esters showed the following products (+)-cis, 3.7%, (-)-cis, 6.6% (+)-trans, 44.6%, and (-)-trans, 45.%.

IT 66227-87-02 64312-76-12 84848-33-99
114580-79-99
RL: SPN (Synthetic preparation), PREP (Preparation) (prepn. of)
RN 64257-87-0 CAPLUS
CN Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2-methyl-1-propenyl)-, octyl

L7 ANSWER 73 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued) Relative stereochemistry.

IT 114644-57-4P
RL: RCT (Reactant); SFN (Synthetic preparation); PREP (Preparation) (prepn., iodination, and reaction of, with vitamin B129)
RN 114644-57-4 CAPLUS
CN 1,2-Cyclopropanedicarboxylic acid,
1-[[[(4-methylphenyl) sulfonyl]oxy]methy
1]-, dimethyl ester, cis- (9CI) (CA INDEX NAME)

Relative stereochemistry.

ANSWER 74 OF 139 CAPLUS COPYRIGHT 2002 ACS ester, (1R-trans) - (9CI) (CA INDEX NAME) (Continued)

Absolute stereochemistry.

Me₂C Ne (CH₂)
$$f$$
 Ne

64312-76-1 CAPLUS Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2-methyl-1-propenyl)-, octyl
ester, (lR-cis)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

84848-33-9 CAPLUS Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2-methyl-1-propenyl)-,

ester, (15-trans) - (9CI) (CA INDEX NAME)

Absolute stereochemistry.

114580-79-9 CAPLUS

Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2-methyl-1-propenyl)-,

ester, cis- (9CI) (CA INDEX NAME)

ANSWER 74 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

26771-06-2, (-)-cis-Chrysanthemic acid RL: RCT (Reactant) (racemization of) 26771-06-2 CAPLUS IT

Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2-methyl-1-propenyl)-, (15,3R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L7 ANSWER 75 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

Absolute stereochemistry.

88335-87-9F 110115-17-8F
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation) (prepn. and lactonization of)
88335-87-9 CAPLUS
1,2-Cyclopropanedicarboxylic acid, monomethyl ester, (1R,2S)- (9CI)

(CA

INDEX NAME)

Absolute stereochemistry. Rotation (-).

RN 110115-17-8 CAPLUS CN Cyclopropanecarboxylic acid, 2-(hydroxymethyl)-, methyl ester, (1R,2S)-

(9CI) (CA INDEX NAME)

Absolute stereochemistry.

826-34-6P, Dimethyl cis-cyclopropane-1,2-dicarboxylate
RL: RCT (Reactant) SFN (Synthetic preparation) FREF (Preparation)
(prepn. and stereoselective hydrolysis of, by pig liver esterase,
monacid ester from)
826-34-6 CAPLUS

CN 1,2-Cyclopropanedicarboxylic acid, dimethyl ester, {1R,2S}-rel-(9CI) (CA INDEX NAME)

Relative stereochemistry.

L7 ANSWER 75 OF 139 CAPLUS COPYRIGHT 2002 ACS ACCESSION NUMBER: 1988:37543 CAPLUS DOCUMENT NUMBER: 108:37543

Enzymes in organic synthesis. 39. Preparations TITLE:

chiral cyclic acid-esters and bicyclic lactones via

stereoselective pig liver esterase catalyzed hydrolyses of cyclic meso diesters Sabbioni, Gabriele: Jones, J. Bryan Dep. Chem., Univ. Toronto, Toronto, ON, MSS 1A1, AUTHOR(S): CORPORATE SOURCE:

Can. SOURCE: J. Org. Chem. (1987), 52(20), 4565-70 CODEN: JOCEAH; ISSN: 0022-3263

DOCUMENT TYPE: Journal

English CASREACT 108:37543 OTHER SOURCE(S):

Pig liver esterase-catalyzed hydrolyses of meso-dimethyl

AB Pig liver esterase-catalyzed hydrolyses of meso-dimethyl cyclopropane-, cyclobutane-, and cyclohexane-1,2-dicarboxylates are enantiotopically specific, giving acid-ester products that are readily converted into gamma-lactones, e.g., I (n = 1-4) of >97% ee that are of value as chiral

cniral synthons. There is a dramatic change of stereospecificity on going from

the cyclopropane and cyclobutane diesters to the cyclohexane

the cyclopropane and cyclodes...

with the cyclopentane diester hydrolysis representing the changeover

point

within the series. This reversal of enzyme stereospecificity is

explicable in terms of a two binding-pocket active-site model.

explicable in Grand Phydrolyses
Hydrolyses
of di-Me oxirane-1,2-dicarboxylate and of cyclopropane-1,2-diacetates

also stereoselective, giving products ee's of up to 30-70%. 80335-96-0P RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation) (prepn. and hydrolysis of, acid from) 8335-96-0 CAPLUS 1,2-Cyclopropanedicarboxylic acid, monomethyl ester, (15,25)- (9CI)

INDEX NAME)

ANSWER 75 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

14590-54-6P RL: SPN (Synthetic preparation); PREP (Preparation)

(prepn. of)
1459-54-6 CAPLUS
1,2-Cyclopropanedicarboxylic acid, (15-trans) - (9CI) (CA INDEX NAME)

ANSWER 76 OF 139 CAPLUS COPYRIGHT 2002 ACS SSION NUMBER: 1988:5308 CAPLUS MENT NUMBER: 108:5308

ACCESSION NUMBER: DOCUMENT NUMBER: TITLE:

Enantiotopic-group differentiation. Catalytic asymmetric ring-opening of prochiral cyclic

anhydrides

with methanol, using Cinchona alkaloids Hiratake, Jun: Inagaki, Minoru: Yamamoto, Yukio; AUTHOR(S):

Junichi Inst. Chem. Res., Kyoto Univ., Uji, 611, Japan J. Chem. Soc., Perkin Trans. 1 (1987), (5), CORPORATE SOURCE: SOURCE:

CODEN: JCPRB4; ISSN: 0300-922X Journal English CASREACT 108:5308

DOCUMENT TYPE:

OTHER SOURCE(S):

AB Asym. ring-opening of prochiral acid anhydrides I (X = CHMcCH2CHMe, CH2CHPhCH2, etc.) with methanol has been achieved with a catalytic quantity of cinchona alkaloids II (R = H, OMe) (cinchonine, cinchonidine, quinine, quinidine, and their epi isomers). The optically active half-ester products HO2CXCO2Me were reduced to the optically active lactones. The ring-opening rate and the selectivity depend on the nature

nature

of the reaction medium, the polarity of solvent, and substrate concn.

selecting the reaction conditions, an enantiomeric excess of up to

has been obtained. The kinetic isotope effect and other mechanistic investigations suggest that the reaction proceeds via general-base catalysis by the quinuclidine moiety of II and that the relative configuration of the C-9 hydroxy group with respect to the C-8 quinuclidine amino function dets. the selectivity of the reaction. 81873-51-0P
RL: RCT (Reactant), SFN (Synthetic preparation); PREP (Preparation) (prepn. and redn. of)

ANSWER 77 OF 139 CAPLUS COPYRIGHT 2002 ACS SSION NUMBER: 1987:597552 CAPLUS MENT NUMBER: 107:197552 ACCESSION NUMBER:

DOCUMENT NUMBER: TITLE:

10':19'652
A highly asymmetric synthesis of 2phenylcyclopropanecarboxylic acid through chiral
copper(II) complex catalyzed carbenoid reaction
Cho, Nam Sook; Shin, Dae Hyun; Lee, Chong Chul;

AUTHOR(S):

Young Coll. Sci., Chungnam Natl. Univ., Daejeon, S. CORPORATE SOURCE:

Korea SOURCE:

Chungnam Kwahak Yonguchi (1985), 12(2), 131-40 CODEN: CJOSDA

DOCUMENT TYPE: LANGUAGE: GI Journal

AB (-)-(lR,2R)-trans-Menthyl 2-phenylcyclopropanecarboxylate (I, R = menthyl)

was synthesized with the aid of a chiral Cu(II) complex catalyst by the addn. reaction of N2CHCO2R (R = menthyl) with PhCH:CH2. The

yield

was 80%, the purity of trans-compd. over 90% and optical purity 75%.

IT 42916-14-3P 67528-70-5P

RL: RCT (Reactant), SPN (Synthetic preparation), PREP (Preparation)

(prepn. and esterification of)

RN 42916-14-3 CAPLUS

RN 67528-70-5 CAPLUS

ANSWER 76 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued) 1,2-Cyclopropanedicarboxylic acid, 3,3-dimethyl-, monomethyl ester, (15,2R)- (9C1) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

81873-49-6P RL: SPN (Synthetic preparation); PREP (Preparation)

(prepn. of) 81873-49-6 CAPLUS

1,2-Cyclopropanedicarboxylic acid, 3,3-dimethyl-, monomethyl ester, (1R,2S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

L7 ANSWER 78 OF 139 ACCESSION NUMBER: DOCUMENT NUMBER: TITLE:

CAPLUS COPYRIGHT 2002 ACS
1987:597179 CAPLUS
107:197179
Stereochemical analysis of an aromatic triplet
di-.pi.-methane rearrangement
Scholl, Bernhard, Hansen, Hans Juergen
Inst. Chim. Org., Univ. Fribourg, Fribourg, AUTHOR(5): CORPORATE SOURCE: CH-1700,

SOURCE:

Switz. Helv. Chim. Acta (1986), 69(8), 1936-58 CODEN: HCACAV, ISSN: 0018-019X Journal English CASREACT 107:197179

DOCUMENT TYPE:

OTHER SOURCE(S):

AB It is shown that (-)-(S)-N,N-dimethyl-2-(1'-methylallyl)aniline [(-)-(S)-1], on direct irradm. in MeCM at 20.degree., undergoes in its lowest-lying triplet state an arom. di-.pi.-methane (ADPM) rearrangement

rangement
to yield (-)-{1'R,2'R}- and (+)-(1'R,2'S)-N,N-dimethyl-2-{2'methylcyclopropyl)aniline ((-)-trans- and (+)-cis-II] in an initial
trans/cis ratio of 4.71 .+-. 0.14 and in optical yields of 28.8 .+-.

and 15 .+-. 5%, resp. The ADPM rearrangement of (-)-(S)-I to the

and cis-configured products occurs with a preponderance of the path leading to retention of configuration at the pivot atom [C(1') in the reactant and C(2') in the products] for (-)-trans-II and to inversion

of configuration for (+)-cis-II, resp. The results can be rationalized

bν assuming reaction paths which involve the occurrence of discrete 1.4-

1,3-diradicals. A general anal. of such ADPM rearrangements which

allow: the classification of these photochem. reactions in terms of

borderline

rrline
cases is presented. It is found that the optical yields in these
step-by-step rearrangements are detd. by the first step, i.e. by the
disrotatory bond formation between C(2) of the arom. moiety and C(2')

the allylic side chain leading to the generation of the

Miradicals. Moderation of the optical yields can occur in the ring closure of the 1,3-diradicals to the final products, which may take place with difference
trans/cis-ratios for the individual 1,3-diradicals. Compds.
(-)-trans-II

ANSWER 78 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued) as well as (+)-cis-II easily undergo the well-known photochem. trans/cis-isomerization. It mainly leads to racemization. However,

small part of the mols. shows trans/cis-isomerization with inversion

configuration at $C(1^t)$, which is best explained by a photochem.

configuration as -...
cleavage
of the C(1')-C(3') bond.
1T 23020-15-7P 23020-18-0P
RL: SPN (Synthetic preparation), PREP (Preparation)
(prepn. and esterification with diazomethane)
RN 23020-15-7 CAPLUS
CN Cyclopropanecarboxylic acid, 2-phenyl-, (15,2S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

RN CN NAME) 23020-18-0 CAPLUS Cyclopropanecarboxylic acid, 2-phenyl-, (1s,2R)- (9CI) (CA INDEX

Absolute stereochemistry.

34702-96-0F 34703-00-9F RL: RCT (Reactant): SPN (Synthetic preparation): PREP (Preparation) (prepn. and hydrolysis of) 34702-96-0 CAPLUS

Cyclopropanecarboxylic acid, 2-phenyl-, ethyl ester, (15,25)- (9CI)

INDEX NAME)

Absolute stereochemistry. Rotation (+).

34703-00-9 CAPLUS

Cyclopropanecarboxylic acid, 2-phenyl-, ethyl ester, (15,2R) - (9CI)

INDEX NAME)

ANSWER 79 OF 139 CAPLUS COPYRIGHT 2002 ACS SSION NUMBER: 1987:515281 CAPLUS MENT NUMBER: 107:115281

ACCESSION NUMBER: DOCUMENT NUMBER: TITLE:

Preparation of substituted cyclopropanes as

pyrethroid

precursors
Woo, Edmund P.; Laux, Joseph J.
Dow Chemical Co., USA
U.S., 7 pp.
CODEN: USXXAM INVENTOR(S):
PATENT ASSIGNEE(S):
SOURCE:

DOCUMENT TYPE: Patent

English

LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE A 19870519 U. CASREACT 107:115281 US 4667050 OTHER SOURCE(S): US 1984-589798 19840315

AB The title compds. (I; A, B = CF3, halo; D = halo; X = H, C2-5 acyl, alkoxycarbonyl, cyano; Y = C2-5 alkoxycarbonyl) were prepd. as pyrethroid precursors. H2C:CHCMe2OAc and NaCH(CO2Me)2 were refluxed in THF

conty. [(PhCH:CH)2CO]2Pd(0) treated with Ph3P to give 86.1% of a 3:1 mixt.

of (FINGHICH, 200] 228(0) treated with PhiP to give 86.1% of a 3:1 mixt.

H2C:GCMe2CH(CO2Me) 2 and (MeO2C) 2CHCH2:CHe2. This mixt. was refluxed with CC14 contg. CuCl and Me3CMH2 to give 90% I (A = B = D = C1; X = Y = CO2Me). The latter (8.7 g) was heated with aq. NaoH for 5 h and the product decarboxylated upon distn. to give 5.31 g (dichlorovinyl) cyclopropanearboxylate II.

IT 64507-48-8P
RL: RCT (Reactant); SPN (Synthetic preparation); PREF (Preparation) (prepn. and decarboxylation of)
RN 64507-48-8 CAPLUS
CN 1.1-Cyclopropanedicarboxylic acid, 3-(2.2-dichloroethenyl)-2,2-dimethyl-(9CI) (CA INDEX NAME)

L7 ANSWER 78 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

Absolute stereochemistry. Rotation (+).

16205-72-4P 67528-63-6P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation) (prepn. and redn. of, with lithium aluminum hydride)
16205-72-4 CAPLUS
Cyclopropanecarboxylic acid, 2-phenyl-, methyl ester, (15,25)- (9CI) RN CN (CA

INDEX NAME)

Absolute stereochemistry.

67528-63-6 CAPLUS Cyclopropanecarboxylic acid, 2-phenyl-, methyl ester, (15-cis)- (9CI) (CA

INDEX NAME)

Absolute stereochemistry.

ANSWER 79 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

ΙT

RN CN (9CI)

(CA INDEX NAME)

RN 82817-08-1 CAPLUS
CN 1,1-Cyclopropanedicarboxylic acid,
2,2-dimethyl-3-(2,2,2-trichloroethyl)-,
dimethyl ester (9C1) (CA INDEX NAME)

(9CI) (CA INDEX NAME) 0 c- o- cH₂ OPh

65384-77-2 CAPLUS Cyclopropanecarboxylic acid, 2,2-dimethyl-, (3-phenoxyphenyl)methyl

55931-15-2 CAPLUS
Cyclopropanecarboxylic acid, 2,2-dichloro-3,3-dimethyl-,
cyano(3-phenoxyphenyl)methyl ester (9CI) (CA INDEX NAME)

(CA INDEX NAME)

C- O- CH2-

L7 ANSWER 80 OF 139 CAPLUS COPYRIGHT 2002 ACS

4-6 h to
give >70% I (R = Q).

IT 39939-04-3P
RL: RCT (Reactant); SPN (Synthetic preparation), PREP (Preparation)
(prepn. and decompn. of)
RN 39939-04-3 CAPLUS
CN Cyclopropanecarboxylic acid, 2,2-dichloro-3,3-dimethyl-, sodium salt
(SCI)

I (R = H) was refluxed with QNEt3Cl in toluene-aq. NaCH for 4-6 h to

with CHCl3, II, and 50% aq. NaOH at 20-80.degree. for 5-7 h to give >60%

with

CHCl3 and esterification of I (R = H) with the appropriate
aralkyltriethylammonium chlorides. A mixt. of Me2C:CHCOMe,
FhCH2NBt3Cl

(II), and aq. NaOCl was stirred with cooling for 3-4 h to give, after
acidification with H2SO4, >608 Me2C:CHCO2H. Me2C:CHCO2Et was heated
with

AB The title compds. [I) R = p-MeOC6H4CH2 (Q), m-PhOC6H4CH2, m-PhOC6H4CH(CN)) are prepd. via phase-transfer catalyzed cycloaddn. of Me2C:CHC02Et are prepd. α with

(9CI)

.CO2R

INVENTOR(S): PATENT ASSIGNEE(S): SOURCE:

CN 85100500 A 19860813 CN 1985-100500

DOCUMENT TYPE: LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION: PATENT NO. KIND DATE

APPLICATION NO. DATE

L7 ANSWER 80 OF 139 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1987:478110 CAPLUS
DOCUMENT NUMBER: 1107:78110
New synthesis method of chlorine-containing
pyrethroid

insecticides

CODEN: CNXXEV

19850401

ou, kequan Peop. Rep. China Faming Zhuanli Shenqing Gongkai Shuomingshu, 7

39871-97-1P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation) (prepn. and esterification of, with benzyltriethylammonium

(prepn. and esterilication or, with penzyltriethylammonium chlorides)
RN 39871-97-1 CAPLUS
CN Cyclopropanecarboxylic acid, 2,2-dichloro-3,3-dimethyl- (9CI) (CA

ANSWER 80 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

INDEX

NAME)

Na

IT

39872-14-5P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation) (prepn. and hydrolysis of)
39872-14-5 CAPLUS
Cyclopropanecarboxylic acid, 2,2-dichloro-3,3-dimethyl-, ethyl ester

(CA INDEX NAME)

42197-70-6P 55931-15-2P 65384-77-2P
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of, as pyrethroid insecticide)
42197-70-6 CAPUE
(Zyclopropanecarboxylic acid, 2,2-dichloro-3,3-dimethyl-,
(3-methoxyphenyl)methyl ester (9CI) (CA INDEX NAME)

L7 ANSWER 81 OF 139 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1987:438945 CAPLUS
DOCUMENT NUMBER: 107:38945
TITLE: Alkylation of carbon-hydrogen acids in the

potassium carbonate. I. Alkylation of carbon-hydrogen

acids with ethyl .alpha.-bromoacrylate and its derivatives
Vardapetyan, A. A.; Khachatryan, D. S.; Panosyan,

AUTHOR(S):

CORPORATE SOURCE:

A.r Morlyan, N. M. USSR Zh. Org. Khim. (1986), 22(11), 2262-6 CODEN: ZORKAE: ISSN: 0514-7492 Journal Russian CASREACT 107:38945 DOCUMENT TYPE: LANGUAGE: OTHER SOURCE(S): GI

Treating CH2(CO2Et)2, MeCOCH2COR (R = Me, EtO), dimedone, or Me2CO AB With CH2:CBrCO2Et and its derivs. in the presence of K2CO3 gave the corresponding cyclopropanes, e.g. I, and dihydrofurans, e.g., II and

839-39-4P 1991-42-0P 22811-70-7P 108967-76-6P 108967-77-7P 108967-80-2P RL: SPN (Synthetic preparation); PREP (Preparation) (prepn. of) 839-39-4 CAPLUS

RN CN 9CI) 1,1,2-Cyclopropanetricarboxylic acid, triethyl ester (6CI, 7CI, 8CI, (CA INDEX NAME)

1991-42-0 CAPLUS 1,2-Cyclopropanedicarboxylic acid, 1-acetyl-, diethyl ester (7CI, 9CI) (CA INDEX NAME)

RN 22811-70-7 CAPLUS CN Cyclopropanecarboxylic acid, 2-benzoyl- (7CI, 8CI, 9CI) (CA INDEX NAME)

108967-76-6 CAPLUS 1,1,2,3-Cyclopropanetetracarboxylic acid, tetraethyl ester, cis-(9CI) (CA INDEX NAME)

Relative stereochemistry.

RN 108967-77-7 CAPLUS

L7 ANSWER 81 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)
CN Cyclopropanecarboxylic acid, 2,2-diacetyl-, ethyl ester (9CI) (CA CN INDEX NAME)

108967-80-2 CAPLUS
1,1,2,3-Cyclopropanetetracarboxylic acid, tetraethyl ester, trans-RN CN (9CI) (CA INDEX NAME)

Relative stereochemistry.

L7 ANSWER 82 OF 139 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1987:33330 CAPLUS
DOCUMENT NUMBER: 106:33330
TITLE: 50 Synthesis of optically active cyphenothrin-14C. Carbon-14 labeling
AUTHOR(S): Kanamaru, Hiroshiy Kamada, Takeshiy Yoshitake,

AUTHOR(S): Akira;

Nakatsuka, Iwao
Takarazuka Res. Cent., Sumitomo Chem. Co., Ltd.,
Takarazuka, Japan
Radioisotopes (1986), 35(3), 103-8
CODEN: RAISAB; ISSN: 0033-8303
JOURnal
English
CASREACT 106:33330 CORPORATE SOURCE:

SOURCE:

DOCUMENT TYPE: LANGUAGE:

OTHER SOURCE(S):

AB The syntheses of (1R)-cis-(I) and (1R)-trans-(carbonyl-14C) cyphenothrin

enothrin (II) for use in metab. studies is described. Cyanation of N-chloromethylphthalimide with K14CN followed by acidic hydrolysis

of the resulting [14C]cyanomethylphthalimide gave [1-14C]glycine-HCl in 65t yield. Esterification followed by condensation of Et [1-14C]dlazoacetate, derived from Et [1-14C]glycinate-HCl, with 2,5-dimethyl-2,4-hexadiene in the presence of Cu catalyst and subsequent basic hydrolysis gave a mixt. of dl-cis- and dl-trans-[14C]chrysanthemic acids. The geometrical

strical isomers were sepd. by silica gel column chromatog, and then optically resolved to give (lR)-cis- and (lR)-trans-[14C]chrysanthemic acids. Esterification of the acids with .alpha.-cyano-3-phenoxybenzyl bromide in

the presence of Bu4N+Br- as phase transfer catalyst gave I and

II.

II. 32511-06-1P 106091-84-3P
RL: SPN (Synthetic preparation); PREP (Preparation) (prepn. and esterification with cyanophenoxybenzyl bromide)
RN 32511-06-1 CAPLUS
CN Cyclopropanecarboxylic-14C acid,
2,2-dimethyl-3-[2-methyl-1-propenyl]-,
(IR-trans)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L7 ANSWER 82 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

106091-84-3 CAPLUS Cyclopropanecarboxylic-14C acid, dimethyl-3-(2-methyl-1-propenyl)-(1R-cis)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

105851-30-7P 105851-32-9P
RL: RCT (Reactant); SFN (Synthetic preparation); PREP (Preparation)
(prepn. and hydrolysis of)
105851-30-7 CAPLUS
Cyclopropanecarboxylic-14C acid,
-dimethyl-3-(2-methyl-1-propenyl)-,
ethyl ester, cis- (9CI) (CA INDEX NAME)

Relative stereochemistry.

RN 105851-32-9 CAPLUS
CN Cyclopropanecarboxylic-14C acid,
2,2-dimethyl-3-(2-methyl-1-propenyl)-,
ethyl ester, trans- (9CI) (CA INDEX NAME)

IT 62623-80-7P 62623-81-8P
RL: SPN (Synthetic preparation); PREP (Preparation) (prepn. and resoln. of)
RN 62623-80-7 CAPLUS
CN Cyclopropanecarboxylic-14C acid,
2,2-dimethyl-3-(2-methyl-1-propenyl)-,
cis- (SCI) (CA INDEX NAME)

Relative stereochemistry.

RN 62623-81-8 CAPLUS
CN Cyclopropanecarboxylic-14C acid,
2,2-dimethyl-3-(2-methyl-1-propenyl)-,
trans- (9CI) (CA INDEX NAME)

Relative stereochemistry.

IT 105851-31-8P
RL: SPM (Synthetic preparation); PREP (Preparation)
(prepn. of)
RN 105851-31-8 CAPLUS
CN Cyclopropanecarboxylic-14C acid,
2,2-dimethyl-3-(2-methyl-1-propenyl)-,
cyano(3-phenoxyphenyl)methyl ester (9CI) (CA INDEX NAME)

L7 ANSWER 83 OF 139 CAPLUS COFYRIGHT 2002 ACS
ACCESSION NUMBER: 1997:17957 CAPLUS
DOCUMENT NUMBER: 106:17957 CYClopropanecarboxylic acid salts and their
application
INVENTOR(S): Lindwurm, Ferenc; Muskovits, Jozsef
Chinoin Gyogyszer es Vegyeszeti Termekek Gyara INVENTOR(S): PATENT ASSIGNEE(S): Rt.,

Hung. Teljes, 14 pp. CODEN: HUXXBU Patent Hungarian 1 SOURCE:

DOCUMENT TYPE: LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE	
	HU 37382	A2	19851228	HU 1983-3198	19830915	
	HU 210649	В	19950628			
GI						

(R1) 2C:CH-

The cyclopropanecarboxylates I (R = C1-4 alkyl; R1 = halo, Me) are

as insecticides and fungicides (no data) by reacting a diazoacetate N2CHCO2R with a pentadiene (R1)2C:CHCH:CMe2 in the presence of the

themselves pesticides. 104119-56-4P 104119-57-5P RL: SFM (Synthetic preparation); PREP (Preparation) (prepn. of, as catalyst and pesticide) 104119-56-4 CAPLUS IT

Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2-methyl-1-propenyl)-, copper(2+) salt (9CI) (CA INDEX NAME)

L7 ANSWER 82 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

ANSWER 83 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

●1/2 Cu(II)

104119-57-5 CAPLUS Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-, copper(2+) salt (9CI) (CA INDEX NAME)

●1/2 Cu(II)

IT 97-41-6P, Ethyl chrysanthemate 59609-49-3P, Ethyl

permethrate
RL: AGR (Agricultural use); BAC (Biological activity or effector,

RLF AGK (AGTICULTURAL USE), DRG (MICHOSTAGE SECTION), BIOL (Biological study), PREP (Preparation), USES (Uses) (prepn. of, as pesticide) 97-41-6 (ACPLUS Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2-methyl-1-propenyl)-,

ester (9CI) (CA INDEX NAME)

59609-49-3 CAPLUS Cyclopropanecarboxylic acid, 3-{2,2-dichloroethenyl}-2,2-dimethyl-, ester (9CI) (CA INDEX NAME)

ANSWER 83 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

IT

10453-69-1, Chrysanthemic acid 55701-05-8
RL: RCT (Reactant)
(reaction of, with copper sulfate)
10453-89-1 CAPLUS
Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2-methyl-1-propenyl)-RN CN (9CI) (CA INDEX NAME)

55701-05-8 CAPLUS
Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-RN CN (9CI) (CA INDEX NAME)

ANSWER 84 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued) 103709-29-1 CAPLUS CCyclopropanecarboxylic acid, 1-{1,2,3,4-tetrahydro-4,7-dimethyl-1-naphthalenyl}-, methyl ester (9CI) (CA INDEX NAME)

L7 ANSWER 84 OF 139 CAPLUS COPYRIGHT 2002 ACS ACCESSION NUMBER: 1986: 497712 CAPLUS DOCUMENT NUMBER: 105:97712 AD acid Total

An acid-catalyzed molecular rearrangement of a guaiane

to a cadinane skeleton Kalsi, P. S.; Handa, Renu Dep. Chem., Punjab Agric. Univ., Ludhiana, 141 AUTHOR(S): CORPORATE SOURCE: 004,

India

INDIA Indian J. Chem., Sect. B (1985), 24B(6), 657-8 CODEN: IJSBDB; ISSN: 0376-4699 Journal SOURCE:

DOCUMENT TYPE:

LANGUAGE: OTHER SOURCE(S): GI English CASREACT 105:97712

The spirocyclopropylguaianolide I, derived from dehydrocostus lactone, undergoes acid-catalyzed rearrangement to afford acid II with a AB undergoes accu---undergoes accu---skeleton.

IT 103709-28-0P
RL: FORM (Formation, nonpreparative); PREP (Preparation)
(formation of, in rearrangement of guaianolide)
RN 103709-28-0 CAPLUS
CN Cyclopropanecarboxylic acid, 1-(1,2,3,4-tetrahydro-4,7-dimethyl-1naphthalenyl) - (9CI) (CA INDEX NAME)

103709-29-1P
RL: SPN (Synthetic preparation); PREP (Preparation) (prepn. of)

L7 ANSYER 85 OF 139 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1986:109977 CAPLUS
DOCUMENT NUMBER: 104:109977
AUTHOR(S): 5VARCHS SOURCE: 5VARCHS SOURCE S

AB Bicyclogermacrene (I) and reproduce
routes
from geranylacetone via Ti-induced cyclizations of cis- and Bicyclogermacrene (I) and lepidozene (II) were synthesized by short

trans-2,2-dimethyl-3-(3-methyl-7-oxo-3E-octenyl) cyclopropanecarbaldehyde.

IT 100693-04-7P 100762-50-3P
RL: RCT (Reactant): SPN (Synthetic preparation); PREP (Preparation)
(prepa. and esterification of)
RN 100693-04-7 CAPLUS
CN Cyclopropanecarboxylic acid,
2,2-dimethyl-3-(3-methyl-7-oxo-3-octenyl)-,
[1.alpha.,3.alpha.(E)]- (9CI) (CA INDEX NAME)

Relative stereochemistry.
Double bond geometry as shown.

RN 100762-50-3 CAPLUS
CN Cyclopropanecarboxylic acid,
2,2-dimethyl-3-(3-methyl-7-oxo-3-octenyl)-,
[1.alpha.,3.beta.(E)]- (9CI) (CA INDEX NAME)

L7 ANSWER 85 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued) Relative stereochemistry.
Double bond geometry as shown.

100693-07-0P 100762-51-4P RL: RCT (Reactant): SPN (Synthetic preparation): PREP (Preparation) (prepn. and redn. of) 100693-07-0 CAPLUS ΙT

NN 100893-07-0 CAPLOS CN Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(3-methyl-7-oxo-3-octenyl)-, methyl ester, [1.alpha.,3.alpha.(E)]- (9CI) (CA INDEX NAME)

Relative stereochemistry.
Double bond geometry as shown.

RN 100762-51-4 CAPLUS
CN Cyclopropaneoarboxylic acid,
2,2-dimethyl-3-(3-methyl-7-oxo-3-octenyl)-,
methyl ester, [1.alpha.,3.beta.(E)]- (9CI) (CA INDEX NAME)

Relative stereochemistry.
Double bond geometry as shown.

ANSWER 86 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued) acid (.+-.)-IV (R1 = OH) and III were esterified by DCC in CH2C12 to give

diastereomers of IV [R1 = (S)-OCH(CN)C6H4OPh-3].
53179-78-5 85701-08-9 55701-07-0
68127-59-3 76023-99-9 88419-72-1
RL: RCT (Reactant)
(esterification of, by cyano(phenoxy)benzyl alc. enantiomer)
53179-78-5 CAPUS

Cyclopropanecarboxylic acid, 3-(2,2-dibromoethenyl)-2,2-dimethyl-, (1R,3R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

| 55701-06-9 CAPLUS | 55701-07-0 CAPLUS | 68127-59-3 CAPLUS | Cyclopropaneoarboxylic acid, |-[(12)-2-chloro-3,3,3-trifluoro-1-propenyl]-| 2,2-dimethyl-, (1R,3R)-rel- (9CI) (CA INDEX NAME)

RN 76023-99-9 CAPLUS
CN Cyclopropanecarboxylic acid,
3-[(1Z)-2-chloro-3,3-trifluoro-1-propenyl]2,2-dimethyl-, (1R,3R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+). Double bond geometry as shown.

88419-72-1 CAPLUS RN 88419-72-1 CAPLUS
CN Cyclopropanecarboxylic acid,
3-[2-chloro-2-(4-chlorophenyl)ethenyl]-2,2dimethyl- (9CI) (CA INDEX NAME)

DOCUMENT NUMBER: TITLE:

ANSWER 86 OF 139 CAPLUS COPYRIGHT 2002 ACS
ESSION NUMBER: 1986:68624 CAPLUS
104:68624
ES: alpha.-Substituted .alpha.-cyanomethyl alcohol
enantiomers
ENTOR(S): Jackson, William Roy
ENT ASSIGNEE(S): ICI Australia Ltd. , Australia
ECE: Brit. UK Pat. Appl., 33 pp.
CODEN: BAOKDU
MENT TYPE: Patent INVENTOR(S): PATENT ASSIGNEE(S): SOURCE:

DOCUMENT TYPE: LANGUAGE: Patent English 2

FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

GI

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	GB 2143823	A1	19850220	GB 1984-18611	19840720
	GB 2143823	B2	19880323		
	AU 8430331	A1	19850124	AU 1984-30331	19830722
	AU 576322	B2	19880825		
	ZA 8405371	Ā	19850227	ZA 1984-5371	19840711
	JP 60042359	A2	19850306	JP 1984-149786	19840720
	BR 8403630	A	19850709	BR 1984-3630	19840720
	HU 36782	A2	19851028	HU 1984-2811	19840720
	HU 198678	В	19891128		
	IL 72459	Ã1	19880229	IL 1984-72459	19840720
	CA 1258075	A1	19890801	CA 1984-459489	19840723
	GB 2186280	A1	19870812	GB 1987-1511	19870123
	GB 2186280	B2	19880323		
PR:	ORITY APPLN. INFO.	. :		AU 1983-432	19830722
				AU 1983-2758	19831218
				GR 1984-18611	19840720

The title cyanohydrins RCH(CN)OH (I; R = alkenyl, alkynyl, aryl, heteroaryl) were prepd. by reaction of RCHO with HCN in the presence

cyclic dipeptide enantiomers below ambient temp. Thus, HCN added to 3-PhOC6H4CHO at ice bath temp. in the presence of piperazinedione II

give (S)-I (R = 3-PhOC6H4)(III) in 70% enantiomeric excess. II was

prepd.
in 4-5 steps from (R)-phenylalanine and (R)-histidine-HCl. I are
useful
intermediates in the prepn. of chiral esters and ethanolamines,
particularly pyrethroids and arylethanolamines. For example,
pyrethroid

ANSWER 86 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

$$\begin{array}{c|c} & \text{Me} & \text{C1} \\ & \text{C} & \text{C} \\ & \text{C} \\ & & \text{C} \\ \end{array}$$

52918-63-5P 65731-84-2P 65732-07-2P
69770-44-1P 72204-43-4P 76703-62-3P
83860-31-5P
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)
52918-63-5 CAPLUS
Cyclopropanecarboxylic acid, 3-(2,2-dibromoethenyl)-2,2-dimethyl-,
(S)-cyano(3-phenoxyphenyl)methyl ester, (1R,3R)- (SCI) (CA INDEX
()) NAME)

65731-84-2 CAPLUS Cyclopropanecarboxylic acid, 3-{2,2-dichloroethenyl}-2,2-dimethyl-, (5)-cyano(3-phenoxyphenyl)methyl ester, (1R,3R)- (9CI) (CA INDEX NAME

Absolute stereochemistry. Rotation (+).

65732-07-2 CAPLUS (S)-cyano(3-phenoxyphenyl)methyl ester, (1R,3S)- (9CI) (CA INDEX NAME)

69770-44-1 CAPLUS
Cyclopropanecarboxylic acid,
-chloro-2-(4-chlorophenyl)ethenyl]-2,2dimethyl-, cyano(3-phenoxyphenyl)methyl ester (9CI) (CA INDEX NAME)

72204-43-4 CAPLUS
Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-,
(S)-cyano(3-phenoxyphenyl)methyl ester, (1S,3S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 76703-62-3 CAPLUS
CN Cyclopropanecarboxylic acid,
3-(2-chloro-3,3,3-trifluoro-1-propenyl)-2,2dimethyl-, cyano(3-phenoxyphenyl)methyl ester, [1R[1.alpha.(S*),3.alpha.(Z)]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Double bond geometry as shown.

L7 ANSWER 87 OF 139 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1985:471551 CAPLUS
DOCUMENT NUMBER: 103:71551
Chiral copper complex and asymmetric synthesis of cyclopropanecarboxylate derivatives using this

complex as catalyst Aratani, Tadatoshi; Yoshihara, Hiroshi; Susukamo, Gohfu

INVENTOR(S):

PATENT ASSIGNEE(S):

Gohfu Sumitomo Chemical Co., Ltd. , Japan Eur. Pat. Appl., 25 pp. CODEN: EPXXDW Patent SOURCE:

DOCUMENT TYPE: LANGUAGE: English

FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 129012	A2	19841212	EP 1984-303662	19840531
EP 128012	A3	19850731		
EP 129012	B1	19861120		
R: DE, FR,	GB, IT			
JP 59225194	A2	19841218	JP 1983-99955	19830603
JP 01053850	B4	19891115		
US 4552972	A	19851112	US 1984-614224	19840524
US 4603218	A	19860729	US 1985-760507	19850730
PRIORITY APPLN. INFO.	. :		JP 1983-99955	19830603
			US 1984-614224	19840524
OTHER SOURCE(S):	CA	SREACT 103:	71551	

AB Chiral Cu complexes I [R = alkyl, aralkyl, R1 = alkoxyphenyl, alkoxyalkylphenyl; R2, R3 = H, halo, alkyl, alkoxy, nitro, R2R3 may

SANONYALNYALNYALNA, ...

form a

benzo ring] reacted with R4NHNH2 [R4 = aralkyl, alkyl, aryl] to form

chiral catalysts for the prepn. of optically active

chrysanthemates from N2CHCO2RS (R5 = alkyl) and prochiral olefins.

Thus, to a mixt. of 0.40 g (+)-I [R = PhCH2, R1 = 2,5-(BuO)Me3CC6H3, R2 =

H), 14 g isobutylene, 0.3 mL PhNHNH2, and toluene was added 16.15 g N2CH2CO2Et in toluene at 40.degree. over 7 h while 33 g isobutylene

was blown into the soln. and the resulting mixt. heated to 80.degree. (to

ANSWER 86 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

83860-31-5 CAPLUS
Cyclopropanecarboxylic acid, 3-{2,2-dichloroethenyl}-2,2-dimethyl-,
(S)-cyano{3-phenoxyphenyl}methyl ester, (1S,3R)- (9CI) (CA INDEX

Absolute stereochemistry.

ANSWER 87 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued) remove excess isobutylene) to give 16.5 g (+)-Et 2,2-dimethylcyclopropanecarboxylate with 88.0% optical purity. 946-38-94 1802-02-4P 60254-14-0P 633146-31-2P 94061-28-6P 60254-14-0P 633146-31-2P 94061-28-6P 95393-68-9P 97250-05-0P 97250-06-1P RE: RCT (Reactant): SPN (Synthetic preparation): PREP (Preparation) (prepn. and hydrolysis of) 946-38-3 CAPLUS Cyclopropanecarboxylic acid, 2-phenyl-, ethyl ester, (1R,2S)-rel-)

RN CN (9CI)

(CA INDEX NAME)

Relative stereochemistry

RN 946-39-4 CAPLUS CN Cyclopropanecarboxylic acid, 2-phenyl-, ethyl ester, (1R,2R)-rel-(9CI) (CA INDEX NAME)

Relative stereochemistry.

1802-02-4 CAPLUS Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2-methyl-1-propenyl)-, ethyl ester, (1R,3R)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

7377-84-6 CAPLUS Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2-methyl-1-propenyl)-, ethyl ester, (1R,3S)-rel- (9CI) (CA INDEX NAME)

L7 ANSWER 87 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

Relative stereochemistry.

RN 59160-05-3 CAPLUS CN cyclopropanecarboxylic acid, 2-hexyl-, ethyl ester, (1R,2S)-rel-(SCI) (CA INDEX NAME)

Relative stereochemistry.

59160-06-4 CAPLUS Cyclopropanecarboxylic acid, 2-hexyl-, ethyl ester, (1R,2R)-rel-RN CN (9CI) (CA INDEX NAME)

Relative stereochemistry.

60254-14-0 CAPLUS Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2,2,2-trichloroethyl)-, ester, (1R, 3R) -rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

L7 ANSWER 87 OF 139 CAPLUS COPYRIGHT 2002 ACS

97250-06-1 CAPLUS Cyclopropanecarboxylic acid, 2,2,3-trimethyl-, ethyl ester, cis-(-)-(9CI) (CA INDEX NAME)

Rotation (-). Absolute stereochemistry unknown.

939-89-9P 939-90-2P 51378-31-5P 59213-08-0P 63254-59-1P 63323-87-5P 63323-88-6P 63323-89-7P 68852-56-2P 68852-58-4P 68852-59-5P 7417-15-4P 97250-04-9P 97277-14-0P 97642-76-7P IT

RL: SPN (Synthetic preparation), PREP (Preparation)

(prepn. of) 939-89-9 CAPLUS

Cyclopropanecarboxylic acid, 2-phenyl-, (1R,2S)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

939-90-2 CAPLUS Cyclopropanecarboxylic acid, 2-phenyl-, (1R,2R)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

L7 ANSWER 87 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)
RN 63314-51-2 CAPLUS
Cyclopropanearaboxylic acid, 2,2-dimethyl-3-(2,2,2-trichloroethyl)-, ethyl

ester, (1R,3S)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

94061-28-6 CAPLUS
Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2-methyl-1-propenyl)-,
1,1-dimethylethyl ester, (1R,3R)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

96393-68-9 CAPLUS Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2-methyl-1-propenyl)-, 1,1-dimethylethyl ester, (1R,3S)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

97250-05-0 CAPLUS Cyclopropanecarboxylic acid, 2,2,3-trimethyl-, ethyl ester, trans-(-)-(9C1) (CA INDEX NAME)

Rotation (-). Absolute stereochemistry unknown.

L7 ANSWER 87 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

51378-31-5 CAPLUS Cyclopropanecarboxylic acid, 2,2,3-trimethyl-, cis-(-)- (9CI) (CA NAME)

Rotation (-). Absolute stereochemistry unknown.

59213-08-0 CAPLUS Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-, 1-methylheptyl ester (9CI) (CA INDEX NAME)

63254-59-1 CAPLUS
Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2-methyl-1-propenyl)-,
1-methylheptyl ester, [1R-[1.alpha.(S*),3.beta.]]- (9CI) (CA INDEX

Absolute stereochemistry.

63323-87-5 CAPLUS

Cycloropanecarboxylic acid, 2,2-dimethyl-3-(2-methyl-1-propenyl)-,
1-methylheptyl ester, [1R-[1.alpha.(S*),3.alpha.]]- (9CI) (CA INDEX

63323-88-6 CAPLUS Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2-methyl-1-propenyl)-, 1-methylheptyl ester, [15-[1.alpha.(R*),3.beta.]]- (9C1) (CA INDEX

Absolute stereochemistry.

Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2-methyl-1-propenyl)-,
1-methylheptyl ester, [1S-[1.alpha.(R*),3.alpha.]]- (9CI) (CA INDEX

Absolute stereochemistry.

68852-56-2 CAPLUS
Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-,
1-methylheptyl ester, [15-[1.alpha.(R*),3.alpha.]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

ANSWER 87 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued) NAME)

Rotation (-). Absolute stereochemistry unknown.

97277-14-0 CAPLUS Cyclopropanecarboxylic acid, 2-hexyl-, cis- (9CI) (CA INDEX NAME) Relative stereochemistry.

97642-76-7 CAPLUS Cyclopropanecarboxylic acid, 2,2-dimethyl-, ethyl ester, (+)- (9CI) (CA INDEX NAME)

Rotation (+).

L7 ANSWER 87 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

68852-58-4 CAPLUS 08892-08-4 CAPLUS Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-, 1-methylheptyl ester, [1S-[1.alpha.(R*),3.beta.]]- (9CI) (CA INDEX

Absolute stereochemistry.

68852-59-5 CAPLUS Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-, 1-methylheptyl ester, [1R-[1.alpha.(5*),3.beta.]]- (9CI) (CA INDEX

Absolute stereochemistry.

74177-15-4 CAPLUS Cyclopropanecarboxylic acid, 2-hexyl-, trans- (9CI) (CA INDEX NAME) Relative stereochemistry.

97250-04-9 CAPLUS Cyclopropanecarboxylic acid, 2,2,3-trimethyl-, trans-(-)- (9CI) (CA

L7 ANSWER 88 OF 139 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1985:454529 CAPLUS
DOCUMENT NUMBER: 103:54529
TITLE: 103:54529
Polymers with cycloaliphatic units in the chain
AUTHOR(S): Bulacovschi, V., Simionescu, C. I.
CORPORATE SOURCE: De. Macromol. Chem., Polytech. Inst. Iassi,

Tassi,

6600, Rom.

50URCE: J. Macromol. Sci., Chem. (1985), A22(5-7), 561-77

CODEN: JMCHBD: ISSN: 0022-233X

DOCUMENT TYPE: Journal
LANGUAGE: English

B This paper describes the synthesis and characterization of some
polycondensation polymers (polyamides and polyesters) which contain
cycloaliph. units in their chains. Syntheses were carried out by
low-temp. polycondensation techniques (interfacial and soln.) and
also by

also by the Yamazaki method in N-methylpyrrolidinone-pyridine soln. using

the Ismacata measure . The products obtained were characterized by phosphite catalyst. The products obtained were characterized by elemental anal., IR spectroscopy, and x-ray diffraction. Thermoanal.

have shown very good thermal properties for all products, but esp.

the
arom. cycloaliph. polyamides, which were stable up to 400.degree..
33458-25-7P 83458-26-8P 83458-27-9P
97464-36-3P 97464-9-9P
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
(prepn. and properties of)
83458-25-7 CAPLUS
Poly(cxy-1,4-phenyleneoxycarbonyl-1,2-cyclopropanediylcarbonyl),
15-

(9CI) (CA INDEX NAME)

83458-26-8 CAPLUS
Poly[(3-oxo-1(3H)-isobenzofuranylidene)-1,4-phenyleneoxycarbonyl-1,2cyclopropanediylcarbonyloxy-1,4-phenylene), trans- (9CI) (CA INDEX

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
RN 83458-27-9 CAPLUS
CN POLY(Goxycarbonyl-1,2-cyclopropanediylcarbonyloxy-1,4-phenylene(1-mathylethylidene)-1,4-phenylene), trans- (9CI) (CA INDEX NAME)

97464-36-3 CAPLUS 1,2-Cyclopropanedicarboxylic acid, 1-methyl-, trans-, polymer with 2-methyl-1,4-benzenedismine (9CI) (CA INDEX NAME)

CM 1

CRN 697-49-4 CMF C6 H8 O4 CDES 2:TRANS

Relative stereochemistry.

CM 2

CRN 95-70-5 CMF C7 H10 N2

97464-37-4 CAPLUS 1,2-Cyolopropanedicarboxylic acid, 1-methyl-, trans-, polymer with 4,4'-methylenebis[benzenamine] (9CI) (CA INDEX NAME)

CM 1

CRN 697-49-4 CMF C6 H8 O4 CDES 2:TRANS

L7 ANSWER 88 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued) CM 1

CRN 696-75-3 CMF C5 H6 O4 CDES 2:TRANS

Relative stereochemistry.

CM 2

CRN 95-70-5 CMF C7 H10 N2

97464-40-9 CAPLUS 1,2-Cyclopropanedicarboxylic acid, trans-, polymer with 4,4'-methylenebis[benzenamine] (9CI) (CA INDEX NAME)

CM 1

CRN 696-75-3 CMF C5 H6 O4 CDES 2:TRANS

Relative stereochemistry.

CM 2

CRN 101-77-9 CMF C13 H14 N2

L7 ANSWER 88 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued) Relative stereochemistry.

CM 2

97464-38-5 CAPLUS 1,2-Cyclopropanedicarboxylic acid, 1-methyl-, trans-, polymer with 1,4-benzenediamine (9CI) (CA INDEX NAME)

CRN 697-49-4 CMF C6 H8 O4 CDES 2:TRANS

Relative stereochemistry.

CM 2

CRN 106-50-3 CMF C6 H8 N2

97464-39-6 CAPLUS 1,2-Cyclopropanedicarboxylic acid, trans-, polymer with 2-methyl-1,4-benzenediamine (9CI) (CA INDEX NAME)

L7 ANSWER 88 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

L7 ANSWER 89 OF 139 CAPLUS COPYRIGHT 2002 ACS ACCESSION NUMBER: 1985: 5943 CAPLUS DOCUMENT NUMBER: 102:5943 ACTIVE TITLE: 90ptically active cyanomet NVENTOR(s): 5toutamic, Donald W.; Ti

Optically active cyanomethyl esters Stoutamire, Donald W.; Tieman, Charles H.; Dong,

PATENT ASSIGNEE(S): SOURCE:

Walter Shell Oil Co. , USA Eur. Pat. Appl., 42 pp. CODEN: EPXXDW

DOCUMENT TYPE: LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

PA:	TENT NO.		KIND	DATE		APPLICATION NO.	
2.					- -		
	109681					EP 1983-111562	19831118
	109681		A3	198601	15		
EP	109681			199203			
		BE,				LI, LU, NL, SE	
	161692		A	198801	16	IN 1983-CA1346	19831102
11	70155		A1	198909	10	IL 1983-70155 US 1983-551547	19831107
US	4582646		A	198604	15	US 1983-551547	19831114
	4594196		A	198606	.0	US 1983-551548 BR 1983-6312 DD 1983-256815 EP 1988-100324	19831114
	8306312		A_	1984070)3	BR 1983-6312	19831117
	216453		A5	198412	12	DD 1983-256815	19831117
	291626		A2	1988112	23	EP 1988-100324	19831118
EP	291626			1989053			
		BE,				LI, LU, NL, SE	
	312124					EP 1988-119480	19831118
EP	312124		A3				
		ΒE,	CH, DE,	FR, G	3, IT,	LI, LU, NL, SE	
EP	451927			199110		EP 1991-201451	19831118
		BE,				LI, LU, NL, SE	
	73443		E	199203	15	AT 1983-111562	19831118
	8304259		A	198405	23	FI 1983-4259	19831121
	8305323		A A A	1984052	23	FI 1983-4259 DK 1983-5323 NO 1983-4257	19831121
	8304257		A	1984052	23	NO 1983-4257	19831121
	8321555		A1	1984053	31	AU 1983-21555	19831121
AU	577032		B2	1988091	15		
JP	59116256		A2	1984070	5	JP 1983-220485	19831121
	03033151		B4	1991051	6		
	527417		A1	1985116	1	ES 1983-527417	19831121
HU	37915		A2	1986032	28	HU 1983-4003	19831121
HU	200584		В	1990072	8		
RO	88828			198607	30	RO 1983-112615 CA 1983-441540 SU 1983-3675006	19831121
	1263800		B3 A1	1989120)5	CA 1983-441540	19831121
SU	1542412		A3	1990020	7	SU 1983-3675006	19831121
US	4723027		A	1988020	2	US 1986-822563	19860127
JP	02270852			1990110		JP 1989-302306	19891122
JP	03238053		A2	1991102	:3	JP 1990-164329	19900625
PRIORITY	APPLN.	NFO.	:		U	S 1982-443513	19821122
					U	S 1982-443513 S 1982-443763 S 1982-443764 S 1983-551548	19821122
					U	5 1982-443764	19821122
					Ü	S 1983-551548	19831114
					E	P 1983-111562	19831118
OTHER SO	OURCE (S):		CAS	REACT 1	.02:594	3	

ANSWER 89 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

ANSWER 89 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

(S)-.alpha.-Cyano alcs. I (R, R1, R2 = H, halo, C1-6 alkyl or alkoxy, halo-substituted C1-6 alkyl or alkoxy) were prepd. by treating (un)substituted 3-PhOC6H4CHO (II) with an HCN source in the presence AB

n
H2O-immiscible aprotic solvent and cyclo(D-Phe-D-His) (III)
catalyst. Thus, II was treated with HCN in the presence of III in
toluene to give 80% (S)-3-PhOC6H4CH(OH)CN. The latter was o-acylated

with

(S)-4-ClC6H4CH(CHMe2)COCl to give the (S,S)-isomer of ester IV. 55667-40-8
RL: RCT (Reactant)
(esterification of, with cyanophenoxybenzyl alc.)
55667-40-8 CAPLUS
Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-,
(1R,3R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

65731-84-2P
RL: SPN (synthetic preparation); PREF (Preparation)
(prepn. of)
65731-84-2 CAPJUS
Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-,
(S)-cyano(3-phenoxyphenyl)methyl ester, (1R,3R)- (9CI) (CA INDEX

Absolute stereochemistry. Rotation (+).

L7 ANSWER 90 OF 139 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1984:510412 CAPLUS
DOCUMENT NUMBER: 101:110412
TITLE: Cyclopropane compounds
INVENTOR(S): Scholes, Gary
PATENT ASSIGNEE(S): Shell Internationale Resonance 101:110412 Cyclopropane compounds Scholes, Gary Shell Internationale Research Maatschappij B. V., Neth. Brit. UK Pat. Appl., 6 pp. CODEN: BAXXDU DOCUMENT TYPE: LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION: Patent English 1

DATE APPLICATION NO. DATE A1 19840404 GB 1982-27086 A1 19841218 US 1983-532413 GB 1982-27086 CASREACT 101:110412 GB 2127012 US 4489005 PRIORITY APPLN. INFO.: OTHER SOURCE(S): GI A1 19840404 A 19841218

AB The acid-catalyzed cyclization of 4,6,6,6-tetrahalohexanoic acid derivs.

gave cyclopropanecarboxylic acid derivs. I (each R is Cl, Br, Rl = H, metal cation, alkyl). A mixt. of CCl3CH2CHClCMe2CH(CN)CO2Et and HCl

was heated at .apprx.100.degree. to give I (R = Cl, Rl = Et).

IT 80436-36-8P 80441-85-6P 91814-46-9P
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)
RN 80436-36-8 CAPLUS
CN Cyclopropanecarboxylic acid,
1-cyano-2, 2-dimethyl-3-(2, 2, 2-trichloroethyl), cis- (9CI) (CA INDEX NAME)

Relative stereochemistry.

RN 80441-85-6 CAPLUS
CN Cyclopropanecarboxylic acid,
1-cyano-2, 2-dimethyl-3-(2, 2, 2-trichloroethyl)-

L7 ANSWER 90 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued) , trans- (9CI) (CA INDEX NAME)

Relative stereochemistry.

91814-46-9 CAPLUS CN Cyclopropanecarboxylic acid, 1-cyano-2,2-dimethyl-3-(2,2,2-trichloroethyl)-, ethyl ester, cis- (9CI) (CA INDEX NAME)

Relative stereochemistry.

RN 91814-47-0 CAPLUS
CN Cyclopropanecarboxylic acid,
1-cyano-2,2-dimethyl-3-(2,2,2-trichloroethyl), ethyl ester, trans- (9CI) (CA INDEX NAME)

Relative stereochemistry.

ANSWER 91 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued) Cyclopropanecarboxylic acid, 1-acetyl-2-butyl-, ethyl ester (9CI) INDEX NAME)

IT

90284-92-7 CAPLUS Cyclopropanecarboxylic acid, 2-butyl-1-chloro-, ethyl ester (9CI) INDEX NAME)

90284-96-1 CAPLUS Cyclopropanecarboxylic acid, 1-acetyl-2-butyl- (9CI) (CA INDEX NAME)

ANSWER 91 OF 139 CAPLUS COPYRIGHT 2002 ACS
SSION NUMBER: 1984:209194 CAPLUS
100:209194 Oxidative addition of 1,3-dicarbonyl compounds to olerins in the presence of the manganese(III) acetate/lithium chloride system and synthesis of functionally substituted cyclopropanes (Uncaptaes Source: Vinogradov, M. G., Dolinko, V. I., Nikishin, G. I. ORATE SOURCE: Inst. Org. Khim., Moscow, USSR Izv. Akad. Nauk SSSR, Ser. Khim. (1984), (2), DOCUMENT NUMBER: TITLE: AUTHOR(S): CORPORATE SOURCE:

CODEN: IASKA6; ISSN: 0002-3353 DOCUMENT TYPE: Journal LANGUAGE: OTHER SOURCE(S): Russian CASREACT 100:209194

AB The title reaction of RCOCH2COR1 (R = R1 = Me, EtO; R = Me, R1 = OEt) with

R2CH:CHR3 $\{R2 = H, R3 = H, Bu, Ph; R2R3 = (CH2)4\}$ in AcOH gave mixts.

the corresponding RCOCX(COR1)CHR2CHC1R3 [X = H, C1(I)] and/or acyldihydrofurans II ratios which varied with R-R3. Cyclohexene also

gave
trans-1,2-dichlorocyclohexane and 3-acetoxycyclohexene under the
reaction
conditions. I cyclized in 50% aq. KOH-C6H6 contg. PhCHZNEt3+ C1- or
18-crown-6 or with Zn to give mono- and diacylcyclopropanes, e.g.,

RN 90284-95-0 CAPLUS

L7 ANSWER 92 OF 139 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1984:208635 CAPLUS
DOCUMENT NUMBER: 100:208635
TILLE: Rearrangements of ylides generated from reactions

diazo compounds with allyl acetals and thicketals

catalytic methods. Heteroatom acceleration of the [2,3]-sigmatropic rearrangement Doyle, Michael P.; Griffin, John H.; Chinn,

AUTHOR(s):

Witchell S., Van Leusen, Daan

CORFORATE SOURCE: Dep. Chem., Hope Coll., Holland, MI, 49423, USA

SOURCE: J. Org. Chem. (1984), 49(11), 1917-25

CODEN: JOCEAH; ISSN: 0022-3263

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 100:208635

AB Allyl acetals undergo ylide generation in Rh2(OAc)4-catalyzed reactions

with diazo esters with subsequent prodn. of 2,5-dialkoxy-4-alkenoates by

the [2,3]-sigmatropic rearrangement in moderate to good yields. The synthetic versatility of this class of polyfunctional compds. is examd.

with selected transformations. Cyclopropanation and Stevens

rearrangement

compete with the [2,3]-sigmatropic rearrangement in certain cases,

influence of reactant structure and reaction conditions on this competition is discussed. Comparative results with allyl ethers,

undergo cyclopropanation almost exclusively, demonstrate that

heteroatom heteroatom substitution on the allylic C atom accelerates ylide rearrangement.

dithioketals such as 2-ethenyl-2-methyl-1,3-dithiane, the ylide

dithioketals such as 2-ethenyl-2-methyl-1,3-dithiane, the ylic generated from Rh2 (OAc)4-catalyzed reactions of N2CHCO2Et undergoes [2,3]-sigmatropic rearrangement in competition with intramol. elimination, but without evidence of either cyclopropanation or Stevens rearrangement.

rearrangement.
Only when the [2,3]-sigmatropic rearrangement cannot occur
competitively
does the Stevens rearrangement become important in reactions with
dithioketals. In these examples the catalytic methodol. for ylide
generation is advanced as an attractive alternative to base-promoted

generation is devanced as an attract methodologies. 72184-71-5P 87986-35-4P 87986-36-5P 87986-38-7P 87986-39-8P 87986-40-1P 89709-86-4P 89709-94-4P 89709-98-8P 89710-06-5P 89772-15-6P

RI: SRN (Synthetic preparation); PREP (Preparation)
(prepn. of)
RN 72184-71-5 CAPLUS
CN Cyclopropanecarboxylic acid, 2-(1,3-dioxolan-2-yl)-, ethyl ester, trans-

1.7 ANSWER 92 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued) (9CI) (CA INDEX NAME)

Relative stereochemistry.

87986-35-4 CAPLUS Cyclopropanecarboxylic acid, 2-(dimethoxymethyl)-, ethyl ester, cis-(9CI) (CA INDEX NAME)

Relative stereochemistry.

RN 87986-36-5 CAPLUS CN Cyclopropanecarboxylic acid, 2-(dimethoxymethyl)-, ethyl ester, (9CI) (CA INDEX NAME)

Relative stereochemistry.

87986-38-7 CAPLUS Cyclopropanecarboxylic acid, 2-(diethoxymethyl)-, ethyl ester, cis-(9CI) (CA INDEX NAME)

87986-39-8 CAPLUS Cyclopropanecarboxylic acid, 2-{diethoxymethyl}-, ethyl ester, trans-(SCI) (CA INDEX NAME)

ANSWER 92 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

89710-06-5 CAPLUS Cyclopropanecarboxylic acid, 2-{dimethoxymethyl}-3-phenyl-, ethyl (1.alpha., 2.beta., 3.alpha.) - (9CI) (CA INDEX NAME)

Relative stereochemistry.

RN 89772-15-6 CAPLUS Cyclopropanecarboxylic acid, 2-(dimethoxymethyl)-3-phenyl-, ethyl (1.alpha., 2.alpha., 3.beta.) - (9CI) (CA INDEX NAME)

Relative stereochemistry.

L7 ANSWER 92 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

Relative stereochemistry.

Cyclopropanecarboxylic acid, 2-(1,3-dioxolan-2-yl)-, ethyl ester, cis-(9CI) (CA INDEX IMME)

Relative stereochemistry.

89709-86-4 CAPLUS Cyclopropanecarboxylic acid, 2-{dimethoxymethyl}- (9CI) (CA INDEX

RN 89709-94-4 CAPLUS
CN 1,1-Cyclopropanedicarboxylic acid, 2-(dimethoxymethyl)-, dimethyl ester (9CI) (CA INDEX NAME)

89709-98-8 CAPLUS 1,1-Cyclopropanedicarboxylic acid, 2-(diethoxymethyl)-, dimethyl ester (SCI) (CA INDEX NAME)

L7 ANSWER 93 OF 139 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1984:64048 CAPLUS
DOCUMENT NUMBER: 100:64048
TITLE: Stereochemistry of the enzymatic ring opening of 1-aminocyclopropanecarboxylic acid
Hill, Richard K.; Prakash, Shimoga R.;

Rolf; Angst, Werner; Martinoni, Bruno; Arigoni, Duilio: Liu, Hung Wen; Walsh, Christopher T. Dep. Chem., Univ. Georgia, Athens, GA, 30602, USA J. Am. Chem. Soc. (1984), 106(3), 795-6 CODEN: JACSAT; ISSN: 0002-7863

CORPORATE SOURCE: SOURCE:

CODEN: JACSAT; ISSN: 0002-7863

DOCUMENT TYPE: Journal
LANGUAGE: English
AB Stereospecifically labeled samples of 1-aminocyclopropanecarboxylic
acid

acid

(ACPC), a key intermediate in ethylene biosynthesis, were prepd. to examine the stereochem. of ring opening to .alpha.-ketobutyrate catalyzed

by ACPC deaminase. The enantiomers of 2,2-dichloro-1phenyleyclopropanecarboxylic acid were sep. converted to (R)- and
(S)-[2,2-2H2]ACPC in a 5-step sequence, and an independent synthesis of

the R antipode was realized in 12 steps beginning with Sharpless asymetoxidn. of 3-hydroymethyl-3-butenyl acetate. Upon enzymic

epoxidn. of 3-hydroymethyl-3-butenyl acetate. Upon enzymic deamination,
(S)-[2,2-2H2]ACPC led to .alpha.-ketobutyrate labeled exclusively in

Me group, whereas the R enantiomer afforded product labeled only in

methylene group. These results demonstrated that ACPC deaminase specifically cleaves the C-C bond to the pro-S methylene group. 80454-65-9 80454-78-8p
RL: RCT (Reactant), SFN (Synthetic preparation); PREP (Preparation) (prepn. and Curtius rearrangement of) 80454-65-3 CAPLUS
Cyclopropane-2, 2-d2-carboxylic acid, 1-phenyl-, (R) - (9CI) (CA INDEX NAME)

Absolute stereochemistry.

88454-78-8 CAPLUS
Cyclopropane-2,2-d2-carboxylic acid, 1-[[[[1,1-dimethylaily1]dimethylaily1]-, [R]- (GCI INDEX NAME)

L7 ANSWER 93 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

ΙT

88454-63-1P
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. and conversion to aldehyde of)
88454-63-1 CAPLUS
Cyclopropanecarboxylic acid, 2-chloro-1-phenyl-, methyl ester, CN Cyclopropa.... (1R-cis)-(9CI) (CA INDEX NAME)

Absolute stereochemistry.

88454-61-9
RL: RCT (Reactant)
(redn. of)
88454-61-9 CAPLUS
Cyclopropanecarboxylic acid, 2,2-dichloro-1-phenyl-, (R)- (9CI) (CA

Absolute stereochemistry.

ANSWER 94 OF 139 CAPLUS COPYRIGHT 2002 ACS

939-90-2 CAPLUS Cyclopropanecarboxylic acid, 2-phenyl-, (1R,ZR)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

946-38-3 CAPLUS Cyclopropanecarboxylic acid, 2-phenyl-, ethyl ester, (1R,2S)-rel-(9CI) (CA INDEX NAME)

Relative stereochemistry.

RN 946-39-4 CAPLUS CN Cyclopropanecarboxylic acid, 2-phenyl-, ethyl ester, (1R,2R)-rel-(9CI) (CA INDEX NAME)

Relative stereochemistry.

RN 3999-55-1 CAPLUS CN 1,2-Cyclopropanedicarboxylic acid, diethyl ester, {1R,2R}-rel- (9CI) INDEX NAME)

Relative stereochemistry.

Palladium(II) acetate, an efficient catalyst for cyclopropanation reactions with ethyl

diazoacetate AUTHOR(S): Joseph Majchrzak, Michal W.; Kotelko, Antoni; Lambert,

p.
Inst. Drug Res., Med. Acad., Lodz, 90 145, Pol.
Synthesis (1983), (6), 469-70
CODEN: SYNTBF, ISSN: 0039-7881
JOURNAL CORPORATE SOURCE:

DOCUMENT TYPE: LANGUAGE: OTHER SOURCE(S): GI English CASREACT 99:104822

AB Mixts. of cyclopropane isomers I and II (R = Ph, CO2Me, Ac, CO2Et; R1 = H,

Me) were obtained by the Pd(OAc)2-catalyzed reaction of N2CHCO2Et with RCR1:CH2. Thus, N2CHCO2Et in C6H6 was slowly added to PhCH:CH2 and Pd(OAc)2 in C6H6 at 40.degree. to give a 2:1 mixt. of II (R = Ph, R1

and I (R - Ph, Rl - H).
697-49-4P 710-43-0P 939-90-2P
946-38-3P 946-39-4P 3999-55-1P
13349-95-6F 13950-03-3P 13950-15-7P
13350-18-0P 33769-99-1P 33769-99-2P
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)
697-49-4 CAPLUS
1,2-Cyclopropanedicarboxylic acid, 1-methyl-, trans- (8CI, 9CI) (CA

RN CN INDEX NAME)

Relative stereochemistry.

710-43-0 CAPLUS
1,2-Cyclopropanedicarboxylic acid, diethyl ester, (1R,25)-rel- (9CI) INDEX NAME)

Relative stereochemistry.

L7 ANSWER 94 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

13949-95-6 CAPLUS Cyclopropanecarboxylic acid, 2-acetyl-, ethyl ester, (1R,2R)-rel-(CA INDEX NAME)

Relative stereochemistry.

13950-03-3 CAPLUS 1,2-Cyclopropanedicarboxylic acid, 1-methyl-, 2-ethyl 1-methyl ester, trans- (9CI) (CA INDEX NAME)

Relative stereochemistry.

$$\begin{array}{c|c} \text{Me} \\ \hline \\ R \\ \hline \\ \end{array} \\ \begin{array}{c} \text{OEt} \\ \end{array}$$

RN CN (9CI) 13950-15-7 CAPLUS Cyclopropanecarboxylic acid, 2-acetyl-, ethyl ester, (1R,2S)-rel-(CA INDEX NAME)

Relative stereochemistry.

RN 13950-18-0 CAPLUS
CN 1,2-Cyclopropanedicarboxylic acid, 1-methyl-, 2-ethyl 1-methyl ester, (9CI) (CA INDEX NAME)

ANSWER 94 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

33769-98-1 CAPLUS
1,2-Cyclopropanedicarboxylic acid, ethyl methyl ester, cis- (8CI, (CA INDEX NAME)

Relative stereochemistry.

33769-99-2 CAPLUS
1,2-Cyclopropanedicarboxylic acid, ethyl methyl ester, trans- (8CI, (CA INDEX NAME)

Relative stereochemistry.

ANSWER 95 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued) (prepn. of) 67375-30-8 CAPLUS
Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-,(R)-cyano(3-phenoxyphenyl)methyl ester, (15,38)-rel- (9CI) (CA INDEX

Relative stereochemistry.

L7 ANSWER 95 OF 139 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1983:178808 CAPLUS
DOCUMENT NUMBER: 98:178808
TITLE: Cyanobenzyl cyclopropane carboxylates
INVENTOR(S): Wood, Derek Alexander
PATENT ASSIGNEE(S): Shell Internationale Research Maatschappij B. V.,

source:

Shell internationale ke Neth. Eur. Pat. Appl., 19 pp. CODEM: EPXXDW Patent English 1 DOCUMENT TYPE: LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 67461	A1	19821222	EP 1982-200551	19820506
EP 67461	B1	19850717		
R: BE, CH,	DE, FR	, GB, IT, LI	I, NL	
CA 1162561	A1	19840221	CA 1982-401877	19820428
US 4409150	A	19831011	US 1982-375998	19820507
DK 8202337	A	19821127	DK 1982-2337	19820524
DK 156828	В	19891009		
DK 156828	С	19900219		
JP 57200347	A2	19821208	JP 1982-86706	19820524
ZA 8203581	A	19830330	ZA 1982-3581	19820524
BR 8203010	A	19830510	BR 1982-3010	19820524
IN 158971	A	19870228	IN 1982-DE394	19820524
PRIORITY APPLN. INFO	.:		GB 1981-16033	19810526

$$\begin{picture}(200,0) \put(0,0){\line(1,0){100}} \put(0,0){\line(1,0){10$$

Esters I (R and R1 independently are H, halo; R2 and R3 independently

Cl, Br, Me), useful as insecticides and pesticides (no data), were

from the resp. acids, .alpha.-cyanobenzyl benzensylfonates, and catalysts (quaternary ammonlum salts, macrocyclic polyethers).

cia-3-(2,2-Dichlorovinyl)-2,2-dimethylcyclopropanecarboxylic acid was treated with 3-PhoCeMHCH(CN)OSCHMMe+4, BuNH BF-, and KZCO3 at 70.degree. to give I (R = Rl = H, R2 = R3 = Cl).

STO01-06-8

RL: RCT (Reactant) (esterification of, by .slpha.-cyanobenzyl tosylate deriv., catalysts for)

5701-06-9 CAPLUS

67375-30-98

RL: SPN (Synthetic preparation); PREP (Preparation)

RL: SPN (Synthetic preparation); PREP (Preparation)

L7 ANSWER 96 OF 139 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1983:126416 CAPLUS
DOCUMENT NUMBER: 98:126416 CAPLUS
1TITLE: 98:126416 CAPLUS
98:126416 CAPLUS
98:126416 CAPLUS
98:126416 CAPLUS
98:126416 CAPLUS
98:126416 CAPLUS
98:126416 CAPLUS
98:126416 CAPLUS
98:126416 CAPLUS
98:126416 CAPLUS
98:126416 CAPLUS
98:126416 CAPLUS
98:126416 CAPLUS
98:126416 CAPLUS
98:126416 CAPLUS
98:126416 CAPLUS
98:126416 CAPLUS
98:126416 CAPLUS
98:126416 CAPLUS
98:126416 CAPLUS
98:126416 CAPLUS
98:126416 CAPLUS
98:126416 CAPLUS
98:126416 CAPLUS
98:126416 CAPLUS
98:126416 CAPLUS
98:126416 CAPLUS
98:126416 CAPLUS
98:126416 CAPLUS
98:126416 CAPLUS
98:126416 CAPLUS
98:126416 CAPLUS
98:126416 CAPLUS
98:126416 CAPLUS
98:126416 CAPLUS
98:126416 CAPLUS
98:126416 CAPLUS
98:126416 CAPLUS
98:126416 CAPLUS
98:126416 CAPLUS
98:126416 CAPLUS
98:126416 CAPLUS
98:126416 CAPLUS
98:126416 CAPLUS
98:126416 CAPLUS
98:126416 CAPLUS
98:126416 CAPLUS
98:126416 CAPLUS
98:126416 CAPLUS
98:126416 CAPLUS
98:126416 CAPLUS
98:126416 CAPLUS
98:126416 CAPLUS
98:126416 CAPLUS
98:126416 CAPLUS
98:126416 CAPLUS
98:126416 CAPLUS
98:126416 CAPLUS
98:126416 CAPLUS
98:126416 CAPLUS
98:126416 CAPLUS
98:126416 CAPLUS
98:126416 CAPLUS
98:126416 CAPLUS
98:126416 CAPLUS
98:126416 CAPLUS
98:126416 CAPLUS
98:126416 CAPLUS
98:126416 CAPLUS
98:126416 CAPLUS
98:126416 CAPLUS
98:126416 CAPLUS
98:126416 CAPLUS
98:126416 CAPLUS
98:126416 CAPLUS
98:126416 CAPLUS
98:126416 CAPLUS
98:126416 CAPLUS
98:126416 CAPLUS
98:126416 CAPLUS
98:126416 CAPLUS
98:126416 CAPLUS
98:126416 CAPLUS
98:126416 CAPLUS
98:126416 CAPLUS
98:126416 CAPLUS
98:126416 CAPLUS
98:126416 CAPLUS
98:126416 CAPLUS
98:126416 CAPLUS
98:126416 CAPLUS
98:126416 CAPLUS
98:126416 CAPLUS
98:126416 CAPLUS
98:126416 CAPLUS
98:126416 CAPLUS
98:126416 CAPLUS
98:126416 CAPLUS
98:126416 CAPLUS
98:126416 CAPLUS
98:126416 CAPLUS
98:126416 CAPLUS
98:126416 CAPLUS
98:126416 CAPLUS
98:126416 CAPLUS
98:126416 CAPLUS
98:126416 CAPLUS
98:126416 CAPLUS
98:126416 CAPLUS
98:126416 CAPLUS
98:126416 CAPLUS
98:126416 CAPLUS
98:126416 CAPLUS

DOCUMENT TYPE: LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

	PAT	ENT	NO.		KIND	DATE			API	LICATION NO.	DATE	
												-
	EP	6188	30		A1	19821	1006		ΕP	1982-301469	19820322	2
	EP	6188	30		В1	19850	0619					
		R:	CH	, DE,	FR, GB,	IT,	NL					
	JΡ	5716	5334	1	A2	19821	1007		JΡ	1981-47818	19810330)
	JP	630	5113	6	B4	19881	1013					
	US	4485	5257		A	19841	1127		US	1982-359320	19820318	ł
101	RITY	API	LN.	INFO.	. :			JP	198	31-47818	19810330)
HE	R SC	URCI	E(S)	:	CAS	REACT	: 98:	126416	5			

AB Racemic cyclopropanecarboxylic acids I [R, Rl = H, Cl-4 alkyl) RRl = (CH2)n, n = 3-5] or their anhydrides were prepd. by racemizing the corresponding optically active, particularly levorotatory, cyclopropanecarboxylic acid anhydrides with a Lewis acid, optionally hydrolyzing the racemized anhydrides. Thus, stirring 15.0 g (-)-trans-I [R = Rl = Me) anhydride, 35 g toluene, and 1.02 g icdine at 70.degree. 60
min. and then hydrolyzing the racemized anhydride with 20% aq. NaOH at 80.degree. for 3 h gave 12.75 g (.+-.)-trans-I [R = Rl = Me).

II 2259-14-5
Ri: RT (Reactant)

RL: RCT (Reactant) (condensation of, with cyclopropanecarboxylic acid chloride deriv.

in

prepn. of acid anhydride) 2259-14-5 CAPLUS

2c39-14-5 CAPLUS Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2-methyl-1-propenyl)-, (15,38)- (9C1) (CA INDEX NAME)

ANSWER 96 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

ΙŤ

705-16-8P 2935-23-1P
RL: FORM (Formation, nonpreparative); PREP (Preparation)
(formation of, by racemization of isomer mixts.)
705-16-8 CAPLUS

705-16-8 CAPLUS
Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2-methyl-1-propenyl)-,
(IR,SR)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

Z955-25-1 CARDS Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2-methyl-1-propenyl)-, (1R,3S)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

85081-19-2P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation) (prepn. and rademization of)
85081-19-2 CAPLUS
Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2-methyl-1-propenyl), anhydride, [15-[1.alpha.(lR*,3R*),3.beta.]]- (SCI) (CA INDEX NAME)

IT 10453-89-1

RL: RCT (Reactant) (racemization of isomer mixts.) 10453-89-1 CAPLUS

L7 ANSWER 97 OF 139 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1983:107599 CAPLUS
DOCUMENT NUMBER: 98:107599
ITILE: Light-induced reactions. XVI. Syntheses of natural

substances with light. III. Asymmetric total synthesis

of 19-norsteroids via a photochemical key reaction:

enantiomerically pure target compounds Quinkert, Gerhard; Schwartz, Ulrich; Stark,

AUTHOR(S): Herbert;

Weber, Wolf Dietrich: Adam, Friedhelm: Baier,

Helmut,

Frank, Gudrun; Duerner, Gerd Inst. Org. Chem., Univ. Frankfurt/Main, Frankfurt/Main, D-6000, Fed. Rep. Ger. Liebigs Ann. Chem. (1982), (11), 1999-2040 CODEN: LACHDL; ISSN: 0170-2041 CORPORATE SOURCE:

SOURCE:

DOCUMENT TYPE: LANGUAGE:

CO2Me III

Enantiomerically pure estrone, 19-norandrost-4-ene-3,17-dione, 17.beta.-estradiol, and 19-nortestosterone were prepd. by total

syntheses via A-D ring condensations to give secosteroid AD moieties and

Subsequent cyclization. The vinylcyclopentanone I was a key intermediate, which underwent photochem. cyclization via an unstable o-quinodimethane to

estratrienones II. The chiral cyclopropanedicarboxylate III was an intermediate in the prepn. of I and was obtained with 95% optical

purity
from (-)-8-phenylmethal malonate by successive cyclocondensation with
BrCHZCH:CHCHZBr, sapon., and esterification with CHZNZ.

17 83597-15-99

L7 ANSWER 96 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)
CN Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2-methyl-1-propenyl)(9C1) (CA INDEX NAME)

38259-73-3P RL: SPN (Synthetic preparation); PREF (Preparation) (prepn. and cyclocondensation, with di-Me methylmalonate) 38259-73-3 CAPLUS 1,1-Cyclopropanedicarboxylic acid, 2-ethenyl-, dimethyl ester, (2R)-CN (9CI) (CA INDEX NAME)

Absolute stereochemistry

84646-70-89

84646-70-0P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation) (prepn. and neutralization of)
84646-70-0 CAPLUS
Strychnidin-10-one, 2,3-dimethoxy-, compd. with (R)-dimethyl
2-ethenyl-1,1-cyclopropanedicarboxylate (1:1) (9C1) (CA INDEX NAME)

CM 1

CRN 38259-73-3 CMF C9 H12 O4

L7 ANSWER 97 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued) CDES 1:R

Absolute stereochemistry.

CM

CRN 357-57-3 CMF C23 H26 N2 O4 CDES 4:.STRYCHNIDINE

Absolute stereochemistry.

L7 ANSWER 97 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

RN 84646-69-5 CAPLUS
CN 1,1-Cyclopropanedicarboxylic acid, 2-ethenyl-,
bis[[1R,25,5R]-5-methyl-2[1-methylethyl)cyclohexyl] ester, (2R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

RN 84658-44-6 CAPLUS
CN 1,1-Cyclopropanedicarboxylic acid, 2-ethenyl-, bis(1,7,7-trimethylbicyclo[2,2:]hept-2-yl) ester,
[IS-[1.alpha.,2.beta.[1(IR*,2S*,4
R*),2S*],4.alpha.]]- (SCI) (CA INDEX NAME)

L7 ANSWER 97 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

$$H_2C = CH$$
 R
 $C - O$
 Me
 Me

RN 84680-67-1 CAPLUS
CN 1,1-Cyclopropanedicarboxylic acid, 2-ethenyl-,
bis[5-methyl-2-(1-methyl-1phenylethyl)cyclohexyl] ester,
[15-[1.alpha.[A*(1R*,2S*,5R*)],2.beta.,5.al
pha.]]- (9CI) (CA INDEX NAME)

RN 84680-68-2 CAPLUS
CN 1,1-Cyclopropanedicarboxylic acid, 2-ethenyl-, bis[5-methyl-2-(1-methylethyl) cyclohexyl] ester,
[1s-[1.alpha,[R*(1R*,22*,5x*)],2.beta.,5.al
pha.]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L7 ANSWER 97 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

RN 84710-59-8 CAPLUS
CN 1,1-Cyclopropanedicarboxylic acid, 2-ethenyl-, bis(1,7,7-trimethylbicyclo[2.2.1]hept-2-yl) ester,
[1R-[1.a]pha, 2,beta, [1[1R*,25*,4
R*),25*],4.alpha.]]- (9CI) (CA INDEX NAME)

$$\text{H}_2\text{C} = \text{CH} \\ \begin{array}{c} 0 \\ \text{C} \\ \text{R} \end{array}$$

53376-55-9P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preph. of)
53376-55-9 CAPLUS
1,1-Cyclopropanedicarboxylic acid, 2-ethenyl-, dimethyl ester, (S)-

(CA INDEX NAME)

L7 ANSWER 97 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

L7 ANSWER 98 OF 139 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1983:71124 CAPLUS 99:71124
TITLE: 79:71124
Radical hydroformylation and hydrogenation of cyclopropenes with HCo(CO)4 and HMn(CO)5
AUTHOR(S): Nalesnik, Theodore E./ Freudenberger, John H./

Orchin,

Milton Dep. Chem., Univ. Cincinnati, Cincinnati, OH, CORPORATE SOURCE: 45221,

SOURCE: J. Organomet. Chem. (1982), 236(1), 95-100
CODEN: JORCAI; ISSN: 0022-328X

DOCUMENT TYPE: Journal
LANGUAGE: English
CTHER SOURCE(S): CASREACT 98:71124
AB The reactions of HCo(CO)4 or HMn(CO)5 with substituted cyclopropenes
are
CONSISTENT with the Courage of HCO

consistent with the formation of intermediate caged radical pairs;
recombination in the cage of the radical pair leads to
hydroformylation,
and cage escape leads to hydrogenation. Steric factors are important

in

detg. rates and the product stereochem.

5861-32-5P 7180-39-4P 7381-97-7P

77050-83-4P 84429-11-8P 84429-12-9P

84429-13-0P 84472-89-1P

RL: SPN (Synthetic preparation), PREP (Preparation)
(prepn. of)

5861-32-5 CAPLUS

Cyclopropanecarboxylic acid, 2,3-diphenyl-, methyl ester,
(1.alpha.,2.beta.,3.alpha.)- (9CI) (CA INDEX NAME)

Relative stereochemistry.

7180-39-4 CAPLUS
Cyclopropanecarboxylic acid, 2,3-dipropyl-, methyl ester, (1.alpha.,2.beta.,3.beta.)- (9CI) (CA INDEX NAME)

Relative stereochemistry.

L7 ANSWER 98 OF 139 CAPLUS COPYRIGHT 2002 ACS

7381-97-7 CAPLUS Cyclopropanecarboxylic acid, 2,3-diphenyl-, methyl ester, (1.alpha.,2.beta.,3.beta.)- (9CI) (CA INDEX NAME)

Relative stereochemistry.

77060-83-4 CAPLUS
Cyclopropanecarboxylic acid, 2-formyl-2,3-diphenyl-, methyl ester,
(1.alpha.,2.alpha.,3.beta.)- (9CI) (CA INDEX NAME)

Relative stereochemistry.

RN 84429-11-8 CAPLUS
CN 1,1-Cyclopropanedicarboxylic acid, 2,3-diphenyl-, dimethyl ester, cis-

(9CI) (CA INDEX NAME)

Relative stereochemistry.

L7 ANSWER 98 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

84429-12-9 CAPLUS Cyclopropanecarboxylic acid, 2-formyl-2,3-dipropyl-, methyl ester, (1.alpha.,2.alpha.,3.beta.)- (9CI) (CA INDEX NAME)

84429-13-0 CAPLUS 1,2-Cyclopropanedicarboxylic acid, 1,3-dipropyl-, 2-methyl ester, {1.alpha.,2.alpha.,3.beta.}- (9CI) (CA INDEX NAME)

Relative stereochemistry.

84472-49-1 CAPLUS Cyclopropanezhoxylic acid, 2-formyl-2,3-diphenyl-, methyl ester, (l.alpha,2.beta.,3.beta.)- (SCI) (CA INDEX NAME)

L7 ANSWER 99 OF 139 CAPLUS COPYRIGHT 2002 ACS

RN 82509-91-9 CAPLUS CN Cyclopropanecarboxylic acid, 3-(2-chloro-2-phenylethenyl)-2,2-dimethyl-, [1.alpha.,3.beta.(E)]- (9CI) (CA INDEX NAME)

Relative stereochemistry.
Double bond geometry as shown.

ΙT 82473-48-1P

RL: SPN (Synthetic preparation); PREP (Preparation) (prepn. of) 82473-48-1 CAPLUS

Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(1,2,2-trichloro-2-phenylethyl)- (9CI) (CA INDEX NAME)

66477-00-7P ΙT

IT 66477-00-7P

RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of, as parasiticide)

RN 66477-00-7 CAPLUS

CN Cyclopropanecarboxylic acid,
3-(2-chloro-2-phenylethenyl)-2,2-dimethyl-,
cyano(3-phenoxyphenyl)methyl ester (9CI) (CA INDEX NAME)

L7 ANSWER 99 OF 139 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1982:563291 CAPLUS
DOCUMENT NUMBER: 97:163291
TITLE: Substituted trans-3-(2-E-phenylalken-1-y1)-2,2dimethylcyclopropanecarboxylic acid
.alpha.-cyano-3-phenoxybenzyl ester,

intermediates for their production and their use as

ectoparasiticides INVENTOR(S): PATENT ASSIGNEE(S): SOURCE: Fuchs, Rainer, Stendel, Wilhelm Bayer A.-G., Fed. Rep. Ger. Ger. Offen., 27 pp. CODEN: GWXEBX Patent German 1

DOCUMENT TYPE:

LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE A1 19820701 DE 1980-3044799 19801128 DE 3044799

.CO2CH (CN) -

AB Title cyclopropanecarboxylates (I: R = H, halo, CN, NO2, alkyl, alkoxy, alkylamino, haloalkyl, etc.; Rl = H, halo, Me, MeO; R2 = H, halo,

alkylamino, haloalkyl, etc.; Rl = H, naio, me, meo, ne ...
haloalkyl), useful as ectoparasiticides (no data), were prepd. by
treating
the appropriate cyclopropanecarbonyl chloride with 3-PhOC6H4CHO and an
alkali metal cyanide in a solvent, optionally in the presence of a
catalyst. Thus, 3.46 g 3-PhOC6H4CHO and 4.7 g
(.+-.)-trans-(E)-3-(2-chloro-2-phenylvinyl)-2,2dimethylcyclopropanecarbonyl chloride stirred 4 h at 20-25.degree.
with

1.4 g NaCN and 0.2 g Bu4N+.Br- in 80 mL cyclohexane and 2 mL H2O gave 84%

844

I (R = Rl = H, R2 = Cl).

IT 82509-90-8P 82509-91-9P
RL: RCT (Reactant): SFN (Synthetic preparation); PREP (Preparation)
(prepn. and chlorination of)
RN 82509-90-8 CAPLUS
CN Cyclopropanecarboxylic acid,
3-(2-chloro-2-phenylethenyl)-2,2-dimethyl-,
[1.alpha.,3.beta.(2)]- (9CI) (CA INDEX NAME)

L7 ANSWER 99 OF 139 CAPLUS COPYRIGHT 2002 ACS

ANSWER 100 OF 139 CAPLUS COPYRIGHT 2002 ACS SSION NUMBER: 1982:552601 CAPLUS MENT NUMBER: 97:162601 ACCESSION NUMBER: DOCUMENT NUMBER:

Insecticidal (1,1'-biphenyl)-3-ylmethyl esters, their

use and compositions containing them Plummer, Ernest L. FMC Corp., USA Eur. Pat. Appl., 68 pp. CODEN: EPXXDW INVENTOR(S): PATENT ASSIGNEE (S): SOURCE:

DOCUMENT TYPE: English 5 LANGUAGE:

FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

1	A1	ENT	NO.		KIN	ID	DATE			AP	PLIC	ATIC	n no.	DAT	ε
						-									
1	EΡ	4997	7		A1	Į.	1982	0421		EP	198	1-30	14543	198	11001
1	ĒΡ	4997	17		B1	l	1986	0226							
		R:	BE,	CH,	DE,	FR,	GB,	IT,	LU,	NL					
ι	JS	4329	518		À		1982	0511		US	198	0-19	3056	198	01002
													5940		10521
1	EΡ	1431	52		A	2	1985	0605		EP	198	4-10	14933	198	11001
1	ΣP	1431	52		A:	3	1985	0717							
		R:	BE.	CH.	DE.	FR.	GB.	IT.	LI.	LU,	NL				
1	ΞP		153									4-10	4934	198	11001
1	ΞP	1431	53												
		R:	BE.	CH.	DE.	FR.	GB.	IT.	LI.	LU.	NL				
RIOR	ETY	APP	LN.	INFO						JS 19	80-1	9305	6	198	01002
									1	JS 19	81-2	6594	10	198	10521
									1	JS 19	78-9	6640	5	197	81204
													5		
													13		11001

GΙ

$$RCO_2CH_2$$
 R_n^1 R_n^2

AB 1,1'-Biphenyl-3-ylmethyl 2,2-dimethylcyclopropanecarboxylates I (R = substituted cyclopropyl; n, m = 0-4; Rl = halo, haloalkyl, Cl-6 alkyl, R2 = halo, haloalkyl, Cl-6 alkyl, Cl-6 alkoxy) (apprx.80 compds.) were prepd. by std. methods and were useful as insecticides (data given). Thus, converting 2,4-difluoro-3-methylaniline to an amide and treating

treating with nitrosylhydrogen sulfate gave the corresponding nitrosoamide which decompd. in C6H6 to give 2,4-difluoro-3-methyl-1,1'-biphenyl. The

ANSWER 100 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued) Relative stereochemistry.

76350-87-3 CAPLUS
Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-,
(2'-methyl[1,1'-biphenyl]-3-yl)methyl ester, trans- (9CI) (CA INDEX

76350-91-9 CAPLUS
Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-,
(4-fluoro[1,1'-biphenyl]-3-yl)methyl ester, cis- (9CI) (CA INDEX NAME)

Relative stereochemistry

76350-92-0 CAPLUS

Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-, (4-fluoro[1,1'-biphenyl}-3-yl)methyl ester, trans- (9CI) (CA INDEX NAME)

Relative stereochemistry.

L7 ANSWER 100 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)
was photochem. brominated with NBS to give
3-bromomethyl-2,4-difluoro-1,1'biphenyl (II). Esterifying Na cis-3-(2,2-dichloroethenyl)-2,2dimethylcyclopropanecarboxylate with II and
1,4-diazabicyclo[2,2.2]cotane
in aq. MeCN give I (R 3-(2,2-dichloroethenyl)-2,2-dimethylcyclopropyl,
R1 - 2-F, R2 = 4-F).
II 59042-49-8P
RL: PREF (Preparation)
(Formation of sodium salt and esterification with
bromomethyldifluorobiphenyl)
RN 59042-49-8 CAPLUS
CN Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl

59042-49-8 CAPLUS COPUCTOR (CAPLUS CAPLUS ACCIDENCE AND COPUCTOR (1R,3R)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

76350-86-2P 76350-87-3P 76350-91-9P
76350-92-DP 76350-93-1P 76350-94-2P
76350-95-PP 76350-99-4P 76350-97-5P
76350-96-6P 76350-99-4P 76351-03-6P
76351-01-4P 76351-02-5P 76351-03-6P
76351-01-4P 76351-02-5P 76351-03-6P
76351-01-PP 76351-01-6P 76351-03-92-P
76351-10-5P 76351-11-6P 76351-13-0P
76351-10-5P 76351-11-6P 76351-13-0P
76351-16-1P 76351-17-2P 76351-18-3P
76351-16-1P 76351-17-2P 76351-18-3P
76351-19-3P 76351-13-17-2P 76351-18-3P
76351-19-3P 76351-15-1P 3617-55-6P
82617-76-3P 82617-55-1P 32617-55-6P
82617-76-5P 82617-56-1P 32617-55-2P
82617-63-PB 82617-56-3P 82617-56-3P
82617-63-PB 82617-67-2P 82617-68-3P
82617-76-3P 82617-71-9P 82617-71-6P
82617-76-3P 82618-71-3P 82617-56-3P
82617-76-3P 82618-71-3P 82617-56-3P
82617-78-3P 82618-77-7P 82617-71-6P
82617-78-3P 82618-77-7P 82617-71-6P
82617-78-3P 82616-68-0P 83169-76-P
83169-70-4P 83169-76-P
83169-77-7P 8316-76-9P
83169-77-7P 8316-76-9P
83169-77-7P 8316-77-9P
83169-77-7P 8316-75-9P
83169-76-0P 83169-77-1P 83213-18-7P
RE: AGR (Agricultural use) BAG (Biological activity or effector, ppt
adverse); SPN (Synthetic preparation); BIOL (Biological study); PF

ept adverse); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses) (prepa. and insecticidal activity of) 76350-86-2 CAPUS

Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-, (2'-methyl[1,1'-biphenyl]-3-yl)methyl ester, cis- (9CI) (CA INDEX NAME

ANSWER 100 OF 139 CAPLUS COPYRIGHT 2002 ACS

76350-93-1 CAPLUS
Cyclopropanecarboxylic acid, 3-(2,2-dichlorcethenyl)-2,2-dimethyl-,
(6-fluoro[1,1'-biphenyl]-3-yl)methyl ester, cis- (9CI) (CA INDEX

Relative stereochemistry.

76350-94-2 CAPLUS
Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-,
(6-fluoro[1,1'-biphenyl]-3-yl)methyl ester, trans- (9CI) (CA INDEX NAME

Relative stereochemistry.

76350-95-3 CAPLUS

Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-, (4-chloro[1,1'-biphenyl]-3-yl)methyl ester, cis- (9CI) (CA INDEX

RN 76350-96-4 CAPLUS
CN Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-, (4-chloro[1,1'-biphenyl]-3-yl)methyl ester, trans- (9CI) (CA INDEX

Relative stereochemistry.

RN 76350-97-5 CAPLUS
CN Cyclopropanecarboxylic acid, 3-{2,2-dichloroethenyl}-2,2-dimethyl-,
(6-chloro[1,1'-biphenyl]-3-yl)methyl ester, cis- (9CI) (CA INDEX

Relative stereochemistry.

RN 76350-98-6 CAPLUS
CN Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-,
(6-chloro[1,1'-biphenyl]-3-yl)methyl ester, trans- (9CI) (CA INDEX

Relative stereochemistry.

L7 ANSWER 100 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

RN 76351-02-5 CAPLUS

CAT (C) Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-, (2,4-dichloro[1,1'-biphenyl]-3-yl)methyl ester, trans- (9CI) (CA INDEX

NAME)

Relative stereochemistry.

RN 76351-03-6 CAPLUS
CN Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-,
(3'-methyl[1,1'-biphenyl]-3-yl)methyl ester, cis- (9CI) (CA INDEX

Relative stereochemistry.

$$\operatorname{Cl}_2\operatorname{C} = \operatorname{R} \operatorname{He}$$

RN 76351-04-7 CAPLUS
CN Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-,
(3'-methyl[1,1'-biphenyl]-3-yl)methyl ester, trans- (9CI) (CA INDEX

Relative stereochemistry.

RN 76351-05-8 CAPLUS
CN cyclopropanecarboxylic acid, 3-{2,2-dichloroethenyl}-2,2-dimethyl-,
(2',3',4',5',6'-pentafluoro[1,1'-biphenyl}-3-yl)methyl ester, trans(9CI)
(CA INDEX NAME)

L7 ANSWER 100 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

RN 76350-99-7 CAPLUS CN Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-, (4-bromof[,1'-biphenyl]-3-yl)methyl ester, cis- (9CI) (CA INDEX NAME)

Relative stereochemistry.

RN 76351-00-3 CAPLUS
CN Cyclopropanecarboxylic acid, 3-{2,2-dichloroethenyl}-2,2-dimethyl-,
(4-bromo[1,1'-biphenyl]-3-yl)methyl ester, trans-(9CI) (CA INDEX
NAME)

Relative stereochemistry.

RN 76351-01-4 CAPLUS
CN Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-,
(2,4-dichloro[1,1'-biphenyl]-3-yl)methyl ester, cis- (9CI) (CA INDEX NAME)

Relative stereochemistry.

L7 ANSWER 100 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued) Relative stereochemistry.

RN 76351-06-9 CAPLUS
CN Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-,
(3'-chloro[1,1'-biphenyl]-3-yl)methyl ester, cis- (9CI) (CA INDEX
NAME)

Relative stereochemistry.

RN 76351-07-0 CAPLUS
CN Cyclopropanecarboxylic acid, 3-{2,2-dichloroethenyl}-2,2-dimethyl-,
(3'-chloro[1,1'-biphenyl]-3-yl)methyl ester, trans- (9C1) (CA INDEX
NAME)

Relative stereochemistry.

RN 76351-08-1 CAPLUS Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-, (2'-fluoro[1,1'-biphenyl]-3-yl)methyl ester, cis- (9CI) (CA INDEX NAME)

ANSWER 100 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

76351-09-2 CAPLUS Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-, (2'-fluoro[1,1'-biphenyl]-3-yl}methyl ester, trans- (9CI) (CA INDEX NAME)

Relative stereochemistry.

76351-10-5 CAPLUS (3'-fluoro[1,1'-biphenyl]-3-yl)methyl ester, cis- (9CI) (CA INDEX

Relative stereochemistry.

76351-11-6 CAPLUS
Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-,
(3'-fluoro[1,1'-biphenyl]-3-yl)methyl ester, trans- (9C1) (CA INDEX

Relative stereochemistry.

ANSWER 100 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

76351-15-0 CAPLUS
Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-,
(2'-chloro[1,1'-biphenyl]-3-yl)methyl ester, trans- (9CI) (CA INDEX

Relative stereochemistry.

76351-16-1 CAPLUS
Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl[3'-(trifluoromethyl)[1,1'-biphenyl]-3-yl]methyl ester, cis- (9CI)

INDEX NAME)

Relative stereochemistry.

76351-17-2 CAPLUS Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-, (2'-methoxy[1,1'-biphenyl]-3-yl)methyl ester, cis- (9CI) (CA INDEX

Relative stereochemistry.

ANSWER 100 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

76351-12-7 CAPLUS
Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-,
(4'-fluoro[1,1'-biphenyl]-3-yl)methyl ester, cis- (9CI) (CA INDEX

Relative stereochemistry.

76351-13-8 CAPLUS
Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-,
(4'-fluoro[1,1'-biphenyl]-3-yl)methyl ester, trans- (9CI) (CA INDEX

Relative stereochemistry.

76351-14-9 CAPLUS
Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-,
(2'-chloro[1,1'-biphenyl]-3-yl)methyl ester, cis- (9CI) (CA INDEX

Relative stereochemistry.

ANSWER 100 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

76351-18-3 CAPLUS
Cyclopropanecarboxylic acid, 3-{2,2-dichloroethenyl}-2,2-dimethyl-,
(2'-methoxy[1,1'-biphenyl]-3-yl)methyl ester, trans- (9CI) (CA INDEX NAME)

76351-19-4 CAPLUS
Cyclopropanecarboxylic acid, 3-{2,2-dichloroethenyl}-2,2-dimethyl-,
{2',4'-dichloro[1,1'-biphenyl]-3-yl}methyl ester, cis- {9CI} (CA TNDEX NAME)

Relative stereochemistry.

76351-20-7 CAPLUS Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-, (2',4'-dichloro[1,1'-biphenyl]-3-yl)methyl ester, trans- (9CI) (CA INDEX NAME)

RN 76351-21-8 CAPLUS
CN Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-,
(2-methyl[1,1'-biphenyl]-3-yl)methyl ester, (1R,3R)-rel- (9CI) (CA
INDEX
NAME)

Relative stereochemistry.

RN 76364-78-8 CAPLUS
CN Cyclopropanecarboxylic acid, 3-{2,2-dichloroethenyl}-2,2-dimethyl-,
(2',3',4',5',6'-pentafluoro[1,1'-biphenyl]-3-yl)methyl ester, cis(SCI)
(CA INDEX NAME)

Relative stereochemistry.

RN 76364-79-9 CAPLUS
CN Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-,
[3'-{trifluoromethyl}{1,1'-biphenyl}-3-yl]methyl ester, trans- (9C1)

INDEX NAME)

Relative stereochemistry.

L7 ANSWER 100 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

RN 82617-55-8 CAPLUS

KNN 82617-35-8 CAPLUS Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-(2,4,5,6-tetrafluoro[1,1'-biphenyl]-3-yl)methyl ester, cis- (9CI)

INDEX NAME) Relative stereochemistry.

RN 82617-57-0 CAPLUS
CN Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-,
(2-ethyl[1,1'-biphenyl]-3-yl)methyl ester, cis- (9CI) (CA INDEX

Relative stereochemistry.

RN 82617-58-1 CAPLUS
CN Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-,
(2-chloro[1,1'-biphenyl]-3-yl)methyl ester, cis- (9CI) (CA INDEX
NAME)

Relative stereochemistry.

RN 82617-59-2 CAPLUS
CN Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-,
(2-fluoro[1,1'-biphenyl]-3-yl)methyl ester, cis- (9CI) (CA INDEX

L7 ANSWER 100 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

RN 79081-38-2 CAPLUS
CN Cyclopropanecarboxylic acid, 2,2,3,3-tetramethyl-, [1,1'-biphenyl]-3ylmethyl ester (9CI) (CA INDEX NAME)

RN 82617-34-3 CAPLUS
CN Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-,
(2,4-dimethyl[1,1'-biphenyl]-3-yl)methyl ester, cis- (9CI) (CA INDEX
NAME)

Relative stereochemistry.

RN 82617-54-7 CAPLUS
CN Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-,
(2,4-dimethyl[1,1'-biphenyl]-3-yl)methyl ester, trans- (9CI) (CA
INDEX
NAME)

Relative stereochemistry.

L7 ANSWER 100 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

Relative stereochemistry.

RN 82617-60-5 CAPLUS
CN Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-,
(2-bromo[1,1'-biphenyl]-3-yl)methyl ester, cis- (9CI) (CA INDEX NAME)

Relative stereochemistry.

RN 92617-61-6 CAPLUS
CN Cyclopropanecarboxylic acid, 3-(cyclopentylidenemethyl)-2,2-dimethyl[1,1'-biphenyl]-3-ylmethyl ester, (1R-trans)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 82617-62-7 CAPLUS
CN Cyclopropanecarboxylic acid, 3-(cyclopentylidenemethyl)-2,2-dimethyl-,
(2-methyl[1,1'-biphenyl]-3-yl)methyl ester, (1R-trans)- (9CI) (CA
INDEX
NAME)

Absolute stereochemistry.

RN 82617-63-8 CAPLUS
CN Cyclopropanecarboxylic acid,
3-(cyclopentylidenemethyl)-2,2-dimethyl-,
(2,4-dimethyl[1,1'-biphenyl]-3-yl)methyl ester, (1R-trans)- (9CI)

INDEX NAME)
Absolute stereochemistry.

RN 82617-64-9 CAPLUS
CN Cyclopropanecarboxylic acid,
3-(cyclopentylidenemethyl)-2,2-dimethyl-,
(2,4,5,6-tetrafluoro[1,1'-biphenyl]-3-yl)methyl ester, (1R-trans)(9C1)
(CA INDEX NAME)

Absolute stereochemistry.

RN 82617-65-0 CAPLUS
CVclopropanecarboxylic acid, 2,2-dimethyl-3-(2-methyl-1-propenyl)-,
(2,4-dimethyl[1,1'-biphenyl]-3-yl)methyl ester, cis- (9CI) (CA INDEX NAME)

L7 ANSWER 100 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

RN 82617-69-4 CAPLUS CN Cyclopropanecarboxylic acid, 2,2,3,3-tetramethyl-, (2-methyl[1,1'-biphenyl]-3-yl)methyl ester (9CI) (CA INDEX NAME)

RN 82617-70-7 CAPLUS
CN Cyclopropanecarboxylic acid, 2,2,3,3-tetramethyl-, (2,4-dimethyl[1,1'-biphenyl]-3-yl)methyl ester (9CI) (CA INDEX NAME)

RN 82617-71-8 CAPLUS
CN Cyclopropanecarboxylic acid, 2,2,3,3-tetramethyl-, (2,4,5,6-tetrafluoro[1,1'-biphenyl]-3-yl)methyl ester (9CI) (CA INDEX NAME)

RN 82617-72-9 CAPLUS
CN Cyclopropanecarboxylic acid, 2,2-dichloro-3,3-dimethyl-,
(2-methyl[1,1'-biphenyl]-3-yl)methyl ester (9CI) (CA INDEX NAME)

L7 ANSWER 100 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

Relative stereochemistry.

RN 82617-66-1 CAPLUS
CN Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2-methyl-1-propenyl)-,
(2,4-dimethyl[1,1'-biphenyl]-3-yl)methyl ester, trans- (9CI) (CA
INDEX
NAME)

Relative stereochemistry.

RN 82617-67-2 CAPLUS
CN Cyclopropanecarboxylic acid,
3-(2-chloro-2-phenylethenyl)-2,2-dimethyl-,
[1,1'-biphenyl]-3-ylmethyl ester, cis- (9CI) (CA INDEX NAME)

Relative stereochemistry. Double bond geometry unknown.

$$\Pr_{\text{Ph}} \left(\begin{array}{c} \text{Ne} & \text{Ne} \\ \text{S} & \text{S} \\ \text{S} & \text{S} \end{array} \right)$$

RN 82617-68-3 CAPLUS CN Cyclopropanecarboxylic acid, 3-(2-chloro-2-phenylethenyl)-2,2-dimethyl-, [1,11-biphenyl]-3-ylmethyl ester, trans- (9CI) (CA INDEX NAME)

Relative stereochemistry.

L7 ANSWER 100 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

$$\begin{array}{c|c} C1 & Me \\ Me & C-O-CH_2 \end{array}$$

RN 82617-73-0 CAPLUS
CN Cyclopropascarboxylic acid, 2,2-dichloro-3,3-dimethyl-,
(2,4-dimethyll,1'-biphenyl)-3-yl)methyl ester (9CI) (CA INDEX NAME)

RN 82617-77-4 CAPLUS
CN Cyclopropanecarboxylic acid, 2,2-dichloro-1-(4-ethoxyphenyl)-,
[1,1'-biphenyl]-3-ylmethyl ester (9CI) (CA INDEX NAME)

RN 82617-78-5 CAPLUS
CN Cyclopropanecarboxylic acid, 2,2-dichloro-1-(4-ethoxyphenyl)-,
(2,4,5,6-tetraflucro[1,1'-biphenyl]-3-yl)methyl ester (9CI) (CA INDEX
NAME)

ANSWER 100 OF 139 CAPLUS COFYRIGHT 2002 ACS (Continued) 83169-68-0 CAPLUS Cyclopropanecarboxylic acid, 3-{2,2-dibromoethenyl}-2,2-dimethyl-, {2,4,5,6-tetrafluoro[1,1'-biphenyl]-3-yl)methyl ester, trans- (9CI)

INDEX NAME)

Relative stereochemistry.

RN 83169-69-1 CAPLUS
CN Cyclopropanecarboxylic acid,
3-(2-chloro-3,3,3-trifluoro-1-propenyl)-2,2dimethyl-, (2,4,5,6-tetrafluoro[1,1'-biphenyl]-3-yl)methyl ester,

(9CI) (CA INDEX NAME)

Relative stereochemistry.
Double bond geometry unknown.

RN 83169-70-4 CAPLUS CN Cyclopropanecarboxylic acid, 3-(2-chlor-03,3,3-trifluoro-1-propenyl)-2,2-dimethyl-, (2,4,6-trifluoro[1,1'-biphenyl]-3-yl)methyl ester, cis-(9CI)

(CA INDEX NAME)

Relative stereochemistry.
Double bond geometry unknown.

ANSWER 100 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

83169-74-8 CAPLUS
Cyclopropanecarboxylic acid, 3-(2,2-dibromoethenyl)-2,2-dimethyl-,
(2,6-difluoro[1,1'-biphenyl]-3-yl)methyl ester, (2R-cis)- (9CI) (CA INDEX NAME

83169-75-9 CAPLUS Cyclopropanecarboxylic acid, 3-(2,2-dibromoethenyl)-2,2-dimethyl-, (2,4,6-trifluoro[1,1'-biphenyl]-3-yl)methyl ester, (2R-cis)- (9CI)

INDEX NAME)

C-O-CH2 Ph

83169-76-0 CAPLUS

Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2-methyl-1-propenyl)-, [1,1'-biphenyl]-3-ylmethyl ester, cis- (9CI) (CA INDEX NAME)

Relative stereochemistry.

ANSWER 100 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

83169-71-5 CAPLUS

83189-71-3 CAPLUS Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-, (2,4,6-trifluoro[1,1'-biphenyl]-3-yl)methyl ester, cis- (9CI) (CA

INDEX NAME)

Relative stereochemistry.

$$\text{Cl}_2\text{C} \xrightarrow{R} \text{Re} \xrightarrow{F} \text{Ph}$$

RN 83169-72-6 CAPLUS
CN Cyclopropanecarboxylic acid,
3-(3-chloro-2,3,3-trifluoro-1-propenyl)-2,2dimethyl-, {2,4,5,6-tetrafluoro{1,1'-biphenyl}-3-y1}methyl ester, cis(SCI) (CA INDEX NAME)

Relative stereochemistry.
Double bond geometry unknown.

$$\begin{array}{c|c} & & & \\ & & & \\ F & & \\ \hline & & & \\ F & & \\ \hline \end{array} \begin{array}{c} & & \\ & & \\ & & \\ \end{array} \begin{array}{c} & & \\ \end{array} \begin{array}{c} & & \\ & \\ \end{array} \begin{array}{c} & & \\ \end{array} \begin{array}{c} & & \\ & \\ \end{array} \begin{array}{c} & & \\ & \\ \end{array} \begin{array}{c} & \\$$

RN 83169-73-7 CAPLUS CN Cyclopropanecarboxylic acid, 3-(3-chloro-2,3,3-trifluoro-1-propenyl)-2,2-dimethyl-, (2,4,6-trifluoro[1,1'-biphenyl]-3-yl)methyl ester, cis-(9CI)

(CA INDEX NAME)

Relative stereochemistry.
Double bond geometry unknown.

ANSWER 100 OF 139 CAPLUS COFYRIGHT 2002 ACS (Continued) 83169-77-1 CAPLUS Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2-methyl-1-propenyl)-, [1,1'-biphenyl]-3-ylmethyl ester, trans- (9CI) (CA INDEX NAME)

83213-18-7 CAPLUS
Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-,
(2,4,6-trifluoro[1,1'-biphenyl]-3-yl)methyl ester, (1R-cis)- (9CI)

INDEX NAME)

Absolute stereochemistry.

76350-74-8P
RL: SPN (Synthetic preparation), PREP (Preparation)
(prepn. and insecticidal properties of)
76350-74-8 CAPLUS
Cyclopropanecarboxylic acid, 3-{2,2-dichloroethenyl}-2,2-dimethyl-,
(2,4-difluoro[1,1'-biphenyl]-3-yl)methyl ester, cis- (9CI) (CA INDEX NAME)

L7 ANSWER 101 OF 139 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1982:543960 CAPLUS
97:143960
TITLE: 57:43960 CAPLUS
97:143960
Stereochemistry of the thermal isomerizations of (25,38)-2-methoxymethyl-2,3-dideuterio-1-(dideuteriomethylene) cyclopropane
Baldwin, John E., Chang, Glenn Eu Chung
Dep. Chem., Univ. Oregon, Eugene, OR, 97403, USA
Tetrahedron (1982), 39(6), 825-35
CODEN: TETRAB, ISSN: 0040-4020

DOCUMENT TYPE:

English CASREACT 97:143960 OTHER SOURCE(S):

AB The (25,3R)-isomer of I was heated at 198.8.degree.; from mol fractions of the 8 isomers of the resulting 2,3.alpha..alpha.- and 2,3,3.alpha.-tetradeuterio-2-methoxymethyl-1-methylenecyclopropanes

consts. were derived for 7 distinct modes of isomerization.

consts. Were derived to 7 of state and the C(2)-C(3) 2-center thermal epimerizations at C-2 and C-3 and the C(2)-C(3) 2-center epimerization are of kinetic importance. Only 2 of 4 observable stereochem. modes for 1,3-C shifts are seen; there is inversion of stereochem. at the migrating C atom, and the C(3)-H trans to C(2)-CHZOMe

1 becomes antisyn 4:1 C(.alpha.)-H in the 1,3-shift product.

-CH2OMe
in I becomes anti:syn 4:1 C(.alpha.)-H in the 1,3-shift product.
35501-83-6P
RL: RCT (Reactant): SPN (Synthetic preparation): PREF (Preparation)
(prepn. and methylation of)
35501-83-8 CAPLUS
Cyclopropanecarboxylic acid, 2-{hydroxymethyl}-, methyl ester,
(1R,2R)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

52920-02-2P 58105-22-9P RL: RCT (Reactant): SPN (Synthetic preparation): PREP (Preparation) (prepn. and redn. of) 52920-02-2 CAPLUS

ANSWER 101 OF 139 CAPLUS COPYRIGHT 2002 ACS

82992-89-0 CAPLUS
Cyclopropane-2,3-d2-carboxylic acid, 2-phenyl-, methyl ester,
(1.alpha.,2.alpha.,3.beta.)- (9CI) (CA INDEX NAME)

82992-90-3 CAPLUS Cyclopropane-2,3-d2-carboxylic acid, 2-phenyl-, [15-(1.alpha.,2.beta.,3.alpha.)) - (9CI) (CA INDEX NAME)

Absolute stereochemistry.

83024-82-2 CAPLUS Cyclopropane-2,3-d2-carboxylic acid, 2-phenyl-, methyl ester, [1s-(1.alpha.,2.beta.,3.alpha.)]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

83024-83-3 CAPLUS Cyclopropane-2.3-d2-carboxylic acid, 2-phenyl-, methyl ester, [15-(1.alpha.,2.beta.,3.beta.)]- (9CI) (CA INDEX NAME)

L7 ANSWER 101 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)
CN 1,2-Cyclopropanedicarboxylic acid, monomethyl ester, (1R,2R)-rel(9C1) (CA INDEX NAME)

Relative stereochemistry.

Cyclopropanecarboxylic acid, 2-(methoxymethyl)-, methyl ester, trans-(9CI) (CA INDEX NAME)

Relative stereochemistry.

82992-88-9P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)
(prepn. and sapon. of)
82992-88-9 CAPLUS
Cyclopropane-2,3-d2-carboxylic acid, 2-phenyl-, 5-methyl-2-(1-methylethyl) cyclohexyl ester (9CI) (CA INDEX NAME)

IT 16205-72-4P 82992-89-0P 82992-90-3P 83024-82-2P 83024-83-3P 83024-84-4P

RL: SPN (Synthetic preparation); PREP (Preparation) (prepn. of)
16205-72-4 CAPLUS

Cyclopropanecarboxylic acid, 2-phenyl-, methyl ester, (15,25)- (9CI)

INDEX NAME)

Absolute stereochemistry.

L7 ANSWER 101 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

83024-84-4 CAPLUS Cyclopropane-2,3-d2-carboxylic acid, 2-phenyl-, [1S-(1.alpha.,2.beta.,3.beta.)]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L7 ANSWER 102 OF 139 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1582:491961 CAPLUS
TITLE: 1582:491961 CAPLUS
TITLE: 1582:491961 (1,1'-biphenyl)-3-ylmethyl esters
TNYENTOR(S): Flummer, Ernest L. Plummer, Ernest L. FMC Corp., USA U.S., 18 pp. Cont.-in-part of U.S. Ser. No.

PATENT ASSIGNEE (S):

SOURCE: 76,636,

abandoned. CODEN: USXXAM DOCUMENT TYPE: LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION: Patent English

PATENT NO.	KIND	DATE		API	LICATION NO.	DATE
US 4329518	A	19820511		US	1980-193056	19801002
110 4214004	A	19800722		US	1978-966405	19781204
EP 63374 EP 63374	A1	19821027		EP	1982-103273	19791109
EP 63374	B1	19840222				
R: CH. DE	. FR. GF	. LU. NL				
IL 67046	A1	19830731		IL	1979-67046	19791119
US 4402973	A	19830906		US	1981-265940	19810521
IL 67046 US 4402973 ZA 8106442 IL 63955 DK 8104352	A	19821229		ZA	1981-6442	19810916
IL 63955	A1	19870331		ΙL	1981-63955	19810928
DK 8104352	A	19820403		DK	1981-4352	19811001
EP 49977	A1	19820421		EP	1981-304543	19811001
EP 49977	В1	19860226				
R: BE, CF	, DE, FF	, GB, IT,	LU, N	ւ		
JP 57091952	A2	19820608		JP	1981-154893	19811001
BR 8106334	A	19820622		BR	1981-6334	19811001
BR 8106334 ES 505939 HU 30450 HU 190370 HU 31049 EP 143152	A1	19830101		ES	1981-505939	19811001
HU 30450	0	19840328		HU	1981-2840	19811001
HU 190370	В	19860828				
HU 31049	0	19840428		HU	1982-3105	19811001
EP 143152	A2	19850605		EP	1984-104933	19811001
EP 143152	A3	19850717				
R: BE, CF						
EP 143153	A2			EP	1984-104934	19811001
EP 143153	A3	19850717				
R: BE, CF	, DE, FF	, GB, IT,	LI, L	J, Ì	4L	
AU 8175990	A1	19820408		AU	1981-75990	19811002
AU 549629	B2	19860206				
DD 202098	A5	19830831		DD	1981-233846	19811002
CA 1171874	A2	19840731		CA	1982-407132	19820712
DK 8203442	A	19820802		DK	1982-3442	19820802
ES 515039	A1	19830601		ES	1982-515039	19820816
ES 515040	A1	19830601		ES	1982-515040	19820816
ES 515041	A1	19830601		ES	1982-515041	19820816
R: BE, CF AU 8175990 AU 549629 DD 202098 CA 1171874 DK 8203442 ES 515039 ES 515040 ES 515041	A1	19830601		ES	1982-515042	19820816
ES 515043 ES 515044 US 4536591 US 4668792	A1					
ES 515044	A1	19830601		ES	1982-515044	19820816
US 4536591	A	19850820		US	1982-515044 1983-464242 1983-563711	19830207
US 4668792	A	19870526		US	1983-563711	19831220
IORITY APPLN. IN	٥.:		US	191	78-966405	19781204
			US	191	79-76636	19790918

ANSWER 102 OF 139 CAPLUS COPYRIGHT 2002 ACS 76351-12-TP 76351-13-8P 76351-14-9P 76351-15-0P 76351-15-0P 76351-15-0P 76351-15-0P 76351-15-0P 76351-15-0P 76351-15-0P 76351-20-PP 76351-21-8P 76351-9P 76351-21-8P 76351-38-9P 26317-34-9P 26317-54-TP 82617-55-8P 82617-55-9P 82617-55-0P 82617-55-0P 82617-55-0P 82617-65-0P 82617-65-0P 82617-65-0P 82617-65-0P 82617-65-0P 82617-67-9P 82617-67-9P 82617-67-9P 82617-77-9P 82617-77-9P 82617-77-9P 82617-77-9P 82617-78-5P 8

PRI

RL: AGR (Agricultural use); BAC (Biological activity or effector,

pt
adverse), SFN (Synthetic preparation), BIOL (Biological study), PREP
(Preparation), USES (Uses)
(prepn. and insecticidal activity of)
76350-74-8 CAPLUS
Cyclopropanecarboxylic acid, 3-{2,2-dichloroethenyl}-2,2-dimethyl-,
{2,4-difluoro[1,1'-biphenyl]-3-yl}methyl ester, cis- (9CI) (CA INDEX
NAME)

Relative stereochemistry.

76350-86-2 CAPLUS

Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-(2'-methyl[1,1'-biphenyl]-3-yl)methyl ester, cis-(9CI) (CA INDEX NAME)

Relative stereochemistry.

76350-87-3 CAPLUS

Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-, (2'-methyl[1,1'-biphenyl]-3-yl)methyl ester, trans- (9CI) (CA INDEX

Relative stereochemistry.

ANSWER 102 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)
EP 1980-900040 19791109
IL 1979-58744 19791119
US 1980-193056 19801032
US 1981-265940 19801032
CA 1981-366098 19810917
DK 1981-4352 19811001
EP 1981-304543 19811001
US 1982-376442 19820510
HER SOURCE(S): CASREACT 97:91961

OTHER SOURCE(S):

[1,1'-Biphenyl]-3-ylmethyl derivs. I (R = OH, MeSO3, 4-MeC6H4SO3, Cl,

[1,17-Biphenyl]-3-yimethyl deriva. I (R = OH, MesOs), 4-Rechasos, Cl.,
F13C, alkoxy) were prepd. by several methods. Thus, stirring
2,4,3-F2(Me)CGENHE with AcCl gave 2,4,3-F2(Me)CGENHRAC which was
converted to the nitrosoacetanilide and decompd. in C6H6 to give
2,4,3-F2(Me)CGENPA which was treated with NBS to give I (R = Br, R1 =
2,4,3-F2Me, R2 = H). I were converted to pyrethroids, e.g. II, whose
insecticidal and acaricidal activity was shown.
59042-49-8
RL: RCT (Reactant)
(esterification of, with bromomethyldifluorobiphenyl)
59042-49-8 CAPLUS
Cyclopropanecarboxylic acid, 3-{2,2-dichloroethenyl}-2,2-dimethyl-,
(IR,3R)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

76350-74-8P 76350-86-2P 76350-87-3P 76350-81-9P 76350-92-0P 76350-93-1P 76350-93-1P 76350-93-1P 76350-93-1P 76350-93-1P 76350-97-5P 76350-98-6P 76351-03-9P 76351-03-6P 76351-IT

ANSWER 102 OF 139 CAPLUS COPYRIGHT 2002 ACS

76350-91-9 CAPLUS Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-, (4-fluoro[1,1'-biphenyl]-3-yl)methyl ester, cis- (9CI) (CA INDEX NAME)

Relative stereochemistry.

76350-92-0 CAPLUS
Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-,
{4-fluoro[1,1'-biphenyl]-3-yl)methyl ester, trans- (9CI) (CA INDEX NAME

Relative stereochemistry.

76350-93-1 CAPLUS

Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-, (6-fluoro[1,1'-biphenyl]-3-yl)methyl ester, cis- (9CI) (CA INDEX

RN 76350-94-2 CAPLUS
CN Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-,
(6-fluoro[1,1'-biphenyl]-3-yl)methyl ester, trans- (9CI) (CA INDEX

Relative stereochemistry.

RN 76350-95-3 CAPLUS
CN Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-,
(4-chloro[1,1'-biphenyl]-3-yl)methyl ester, cis- (9CI) (CA INDEX

Relative stereochemistry.

RN 76350-96-4 CAPLUS
CN Cyclopropanecarboxylic acid, 3-{2,2-dichloroethenyl}-2,2-dimethyl-,
{4-chloro[1,1'-biphenyl]-3-yl]methyl ester, trans- (9CI) (CA INDEX
NAME)

Relative stereochemistry.

L7 ANSWER 102 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

RN 76351-00-3 CAPLUS
CN Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-,
(4-bromo[1,1'-biphenyl]-3-yl)methyl ester, trans- (9CI) (CA INDEX
NAME)

Relative stereochemistry.

RN 76351-01-4 CAPLUS
CN Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-,
(2,4-dichloro[1,1'-biphenyl]-3-yl)methyl ester, cis- (9CI) (CA INDEX NAME)

Relative stereochemistry.

RN 76351-02-5 CAPLUS
CN Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-,(2,4-dichloro[1,1"-biphenyl]-3-yl)methyl ester, trans- (9CI) (CA INDEX NAME)

Relative stereochemistry.

L7 ANSWER 102 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

RN 76350-97-5 CAPLUS
CN Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-,
(6-chloro[1,1'-biphenyl]-3-yl)methyl ester, cis- (9CI) (CA INDEX

Relative stereochemistry.

RN 76350-98-6 CAPLUS
CN Cyclopropanecarboxylic acid, 3-{2,2-dichloroethenyl}-2,2-dimethyl-,
(6-chloro[1,1'-biphenyl]-3-yl)methyl ester, trans- (9CI) (CA INDEX

Relative stereochemistry.

RN 76350-99-7 CAPLUS
CN Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-,
(4-bromo[1,1'-biphenyl]-3-yl)methyl ester, cis- (9CI) (CA INDEX NAME)

Relative stereochemistry.

L7 ANSWER 102 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

RN 76351-03-6 CAPLUS
CN Cyclopropanecarboxylic acid, 3-{2,2-dichloroethenyl}-2,2-dimethyl-,
(3'-methyl[1,1'-biphenyl]-3-yl)methyl ester, cis- {9CI} (CA INDEX

Relative stereochemistry.

RN 76351-04-7 CAPLUS
CN Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-,
(3'-methyl[1,1'-biphenyl]-3-yl)methyl ester, trans- (9CI) (CA INDEX NAME)

Relative stereochemistry.

RN 76351-05-8 CAPLUS
CN Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-,
(2',3',4',5',6'-pentafluoro[1,1'-biphenyl]-3-yl)methyl ester, trans(9CI)
(CA INDEX NAME)

RN 76351-06-9 CAPLUS
CN Cyclopropanecarboxylic acid, 3-{2,2-dichloroethenyl}-2,2-dimethyl(3'-chloro[1,1'-biphenyl]-3-yl)methyl ester, cis- (9CI) (CA INDEX

Relative stereochemistry.

RN 76351-07-0 CAPLUS
CN Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-,
(3'-chloro[1,1'-biphenyl)-3-yl)methyl ester, trans- (9CI) (CA INDEX

Relative stereochemistry.

RN 76351-08-1 CAPLUS
CN Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-,
(2'-fluoro[1,1'-biphenyl]-3-yl)methyl ester, cis- (9CI) (CA INDEX

Relative stereochemistry.

L7 ANSWER 102 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

RN 76351-12-7 CAPLUS
CN Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-,
(4'-fluoro[1,1'-biphenyl)-3-yl)methyl ester, cis- (9CI) (CA INDEX NAME)

Relative stereochemistry.

RN 76351-13-8 CAPLUS
CN Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-,
(4'-fluoro[1,1'-biphenyl]-3-yl)methyl ester, trans- (9CI) (CA INDEX
NAME)

Relative stereochemistry.

RN 76351-14-9 CAPLUS
CN Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl(2'-chloro[l,1'-biphenyl]-3-yl)methyl ester, cis- (9CI) (CA INDEX
NAME)

Relative stereochemistry.

L7 ANSWER 102 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

RN 76351-09-2 CAPLUS
CN cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-,
(2'-fluoro[1,1'-biphenyl]-3-yl)methyl ester, trans- (9CI) (CA INDEX

Relative stereochemistry.

RN 76351-10-5 CAPLUS CC Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-, (3-fluorof[,1]-biphenyl]-3-yl)methyl ester, cis- (9CI) (CA INDEX

Relative stereochemistry.

RN 76351-11-6 CAPLUS
CN Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-,
(3'-fluoro[1,1'-biphenyl]-3-yl)methyl ester, trans- (9CI) (CA INDEX

Relative stereochemistry.

L7 ANSWER 102 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

RN 76351-15-0 CAPLUS
CN Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-,
(2'-chloro[1,1'-biphenyl]-3-yl)methyl ester, trans- (9CI) (CA INDEX

Relative stereochemistry.

RN 76351-16-1 CAPLUS
CN Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-,
[3'-(trifluoromethyl)[1,1'-biphenyl]-3-yl]methyl ester, cis- (9CI)

INDEX NAME)

Relative stereochemistry.

RN 76351-17-2 CAPLUS
CN Cyclopropanecarboxylic acid, 3-(2,2-dichlorosthenyl)-2,2-dimethyl-,
(2'-methoxy[1,1'-biphenyl]-3-yl)methyl ester, cis- (9CI) (CA INDEX

RN 76351-18-3 CAPLUS
CVclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-,
{2'-methoxy[1,1'-biphenyl]-3-yl}methyl ester, trans- (9CI) (CA INDEX NAME)

Relative stereochemistry.

RN 76351-19-4 CAPLUS
CN Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-,
[2',4'-dichloro[1,1'-biphenyl]-3-yl)methyl ester, cis- (9CI) (CA
INDEX
NAME)

Relative stereochemistry.

RN 76351-20-7 CAPLUS
CN Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-,
(2',4'-dichloro(1,1'-biphenyl)-3-yl)methyl ester, trans- (9CI) (CA
INDEX
NAME)

Relative stereochemistry.

L7 ANSWER 102 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

RN 79081-38-2 CAPLUS
CN Cyclopropanecarboxylic acid, 2,2,3,3-tetramethyl-, [1,1'-biphenyl]-3ylmethyl ester (9CI) (CA INDEX NAME)

RN 79081-40-6 CAPLUS
CN Cyclopropascarboxylic acid, 2,2-dimethyl-3-(2-methyl-1-propenyl)-,
[1,1'-biphenyl]-3-ylmethyl ester (SCI) (CA INDEX NAME)

RN 82617-34-3 CAPLUS
CN Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-, (2,4-dimethyl[1,1'-biphenyl]-3-yl)methyl ester, cis- (9CI) (CA INDEX NAME)

Relative stereochemistry.

RN 82617-54-7 CAPLUS
CN Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-, (2,4-dimethyl[1,1*-biphenyl]-3-yl)methyl ester, trans- (9CI) (CA

1.7 ANSWER 102 OF 139 CAPILIS COPYRIGHT 2002 ACS (Continued)

RN 76351-21-8 CAPLUS CVclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-, (2-methyl[1,1'-biphenyl]-3-yl)methyl ester, (1R,3R)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

RN 76364-78-8 CAPLUS
CN Cyclopropanecarboxylic acid, 3-{2,2-dichloroethenyl}-2,2-dimethyl-,
(21,3',4',5',6'-pentafluoro[1,1'-biphenyl]-3-yl)methyl ester, cis(9CI)
(CA INDEX NAME)

Relative stereochemistry.

RN 76364-79-9 CAPLUS CN Cyclopropanecarboxylic acid, 3-{2,2-dichloroethenyl}-2,2-dimethyl-, [3'-(trifluoromethyl)[1,1'-biphenyl}-3-yl]methyl ester, trans- [9Cl)

(CA INDEX NAME)

Relative stereochemistry.

L7 ANSWER 102 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued) NAME)

Relative stereochemistry.

RN 82617-55-8 CAPLUS
CN Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-, (2,4,5,6-tetrafluoro[1,1'-biphenyl]-3-yl)methyl ester, cis- (9CI) (CA INDEX NAME)

Relative stereochemistry.

RN 82617-56-9 CAPLUS
CN Cyclopropanecarboxylic acid, 3-{2,2-dichloroethenyl}-2,2-dimethyl-,
(2,4,5,6-tetrafluoro[1,1'-biphenyl]-3-yl)methyl ester, trans- (9CI)
(CA INDEX NAME)

Relative stereochemistry.

RN 82617-57-0 CAPLUS
CN Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-,
(2-ethyl[1,1'-biphenyl]-3-yl)methyl ester, cis- (9CI) (CA INDEX NAME)

ANSWER 102 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

82617-58-1 CAPLUS Cyclopropanecarboxylic acid, 3-{2,2-dichloroethenyl}-2,2-dimethyl-, (2-chloro[1,1'-biphenyl]-3-yl)methyl ester, cis- (9CI) (CA INDEX

Relative stereochemistry.

82617-59-2 CAPLUS Cyclopropanceshoxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-, (2-fluoro[1,1'-biphenyl]-3-yl)methyl ester, cis- (9CI) (CA INDEX

Relative stereochemistry.

82617-60-5 CAPLUS
Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-,
(2-bromo[1,1'-biphenyl]-3-yl)methyl ester, cis- (9CI) (CA INDEX NAME)

Relative stereochemistry.

L7 ANSWER 102 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)
CN Cyclopropanecarboxylic acid,
3-(cyclopentylidenemethyl)-2, 2-dimethyl-,
(2,4,5,6-tetrafluoro[1,1'-biphenyl]-3-yl)methyl ester, (1R-trans)-(CA INDEX NAME)

Absolute stereochemistry.

82617-65-0 CAPLUS Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2-methyl-1-propenyl)-, (2,4-dimethyl[1,1'-biphenyl]-3-yl)methyl ester, cis- (9CI) (CA INDEX NAME)

Relative stereochemistry.

82617-66-1 CAPLUS Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2-methyl-1-propenyl)-, (2,4-dimethyl[1,1"-biphenyl]-3-yl)methyl ester, trans- (9C1) (CA INDEX NAME)

Relative stereochemistry.

RN 82617-67-2 CAPLUS
CN Cyclopropanecarboxylic acid,
3-(2-chloro-2-phenylethenyl)-2,2-dimethyl-,
[1,1'-biphenyl]-3-ylmethyl ester, cis- (9CI) (CA INDEX NAME)

L7 ANSWER 102 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

82617-61-6 CAPLUS Cyclopropanecatoxylic acid, 3-(cyclopentylidenemethyl)-2,2-dimethyl-[1,1'-biphenyl]-3-ylmethyl ester, (IR-trans)- (SCI) (CA INDEX NAME)

Absolute stereochemistry.

82617-62-7 CAPLUS Cyclopropanecstoxylic scid, 3-(cyclopentylidenemethyl)-2,2-dimethyl-, (2-methyl[1,1'-biphenyl]-3-yl)methyl ester, (IR-trans)- (9CI) (CA

Absolute stereochemistry.

82617-63-8 CAPLUS Cyclopropanecarboxylic acid, 3-{cyclopentylidenemethyl}-2,2-dimethyl-, (2,4-dimethyl[1,1'-biphenyl]-3-yl)methyl ester, (1R-trans)- (9CI) {CA RNDEX NAME)

Absolute stereochemistry.

82617-64-9 CAPLUS

L7 ANSWER 102 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

Relative stereochemistry. Double bond geometry unknown

RN 82617-68-3 CAPLUS
CN Cyclopropanecarboxylic acid,
3-(2-chloro-2-phenyle-thenyl)-2,2-dimethyl-,
{1,1'-biphenyl}-3-ylmethyl ester, trans- (9CI) (CA INDEX NAME)

Relative stereochemistry.
Double bond geometry unknown.

$$Ph \xrightarrow{C1} R \xrightarrow{Me} S \xrightarrow{R} Ph$$

82617-69-4 CAPLUS Cyclopropanecarboxylic acid, 2,2,3,3-tetramethyl-, (2-methyl[1,1'-biphenyl]-3-yl)methyl ester (9CI) (CA INDEX NAME)

82617-70-7 CAPLUS Cyclopropanecskylic acid, 2,2,3,3-tetramethyl-, (2,4-dimethyl[1,1'-biphanyl]-3-yl)methyl ester (9CI) (CA INDEX NAME)

ANSWER 102 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued) 82617-71-8 CAPLUS Cyclopropanecarboxylic acid, 2,2,3,3-tetramethyl-, (2,4,5,6-tetrafluoro[1,1'-biphenyl]-3-yl)methyl ester (9CI) (CA INDEX NAME)

82617-72-9 CAPLUS Cyclopropanecarboxylic acid, 2,2-dichloro-3,3-dimethyl-, (2-methyl[1,1'-biphenyl]-3-yl)methyl ester (9CI) (CA INDEX NAME)

82617-73-0 CAPLUS 62017-73-0 CAPLUS
Cyclopropanecarboxylic acid, 2,2-dichloro-3,3-dimethyl-,
{2,4-dimethyl[1,1'-biphenyl]-3-yl)methyl ester (9CI) (CA INDEX NAME)

82617-77-4 CAPLUS Cyclopropanecarboxylic acid, 2,2-dichloro-1-(4-ethoxyphenyl)-, [1,1'-biphenyl]-3-ylmethyl ester (9CI) (CA INDEX NAME)

L7 ANSWER 103 OF 139 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1982:424013 CAPLUS
DOCUMENT NUMBER: 97:24013
ASymmetric synthesis of permethric acid.
Stereochemistry of chiral copper carbenoid

reaction AUTHOR(S):

Aratani, Tadatoshi, Yoneyoshi, Yukio; Nagase, Tsuneyuki Cent. Res. Lab., Sumitomo Chem. Co., Ltd.,

CORPORATE SOURCE: Osaka, 569,

Japan Tetrahedron Lett. (1982), 23(6), 685-8 CODEN: TELEAY, ISSN: 0040-4039 Journal English

SOURCE:

DOCUMENT TYPE: LANGUAGE: GI

AB Olefins underwent stereoselective cyclopropanation by diazo compds.
in the
presence of R- or S-catalyst I (R = 2-octyloxy-5-tertbutylphenyl); this method was used for the enantioselective prepn. of
1R-C1s-permethric acid (II). Thus, Eto2CCHN2 was added to
C13CCH2CH:C4e2

Cl3CCH2CH:CMe2

in the presence of S-I at 30.degree. over 4.75 h to give a cyclopropane
ester, which underwent sapon. and dehydrochlorination by refluxing in KOH/aq. EtOH for 5 h to give 92t product, comprising 80.6% II.

2020-18-09 4612-65-18-09 5701-05-89

55701-09-29 71697-60-49 71697-61-59

71697-62-69 80205-82-79 80205-83-89

8205-84-99 8205-83-89 80205-83-99

8205-84-99 8205-83-94 8205-83-94

8205-90-79 82055-91-99 8205-93-99

8205-93-09 8205-91-99 8205-93-99

8205-93-09 82165-94-49 82165-94-99
RL: SFN (Synthetic preparation); PREP (Preparation)

RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)
23020-18-9 CAPLUS
Cyclopropanecarboxylic acid, 2-phenyl-, (15,2R)- (9CI) (CA INDEX

Absolute stereochemistry.

1.7 ANSWER 102 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

82617-78-5 CAPLUS

Cyclopropanecarboxylic acid, 2,2-dichloro-1-(4-ethoxyphenyl)-, (2,4,5,6-tetrafluoro[1,1'-biphenyl]-3-yl)methyl ester (9CI) (CA INDEX

L7 ANSWER 103 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

RN 48126-51-8 CAPLUS CN Cyclopropanecarboxylic acid, 2-phenyl-, (1R,2S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

55701-05-8 CAPLUS Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-(CA INDEX NAME)

55701-09-2 CAPLUS Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-, (15,3R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

71697-60-4 CAPLUS /1691-00-4 CAFEDS Cyclopropaecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-,5-methyl-2-(1-methylethyl)cyclohexyl ester, [IR-[l.alpha.[15+,384],2.beta.,5.alpha.]]- (5C) (CA INDEX NAME)

Absolute stereochemistry.

71697-61-5 CAPLUS
Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-,5-methyl-2-(1-methylethyl)cyclohexyl ester, [1R-[1.alpha.(1R*,35*),2.beta.,5.alpha.]}- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

71697-62-6 CAPLUS Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-,5-methyl-2-(1-methylethyl)cyclohexyl ester, [1R-[1.alpha.(1S*,3S*),2.beta.,5.alpha.]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

82095-82-7 CAPLUS Cyclopropanecarboxylic acid, 3-(2,2-dichloroethyl)-2,2-dimethyl-, ester, (1R-cis) - (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L7 ANSWER 103 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

82095-86-1 CAPLUS Cyclopropanecarboxylic acid, 3-(2-bromoethyl)-2,2-dimethyl-, ethyl ester, (1R-cis) - (9CI) (CA INDEX NAME)

Absolute stereochemistry.

82095-87-2 CAPLUS Cyclopropanecarboxylic acid, 3-{2-bromoethy1}-2,2-dimethy1-,5-methy1-2-(1-methy1ethy1)cyclohexyl ester, [1R-[1.alpha.(1R*,3S*),2.beta.,5.alpha.]]- (9CI) (CA INDEX NAME)

82095-88-3 CAPLUS Cyclopropanecarboxylic acid, 2-hexyl-, cis-(+)- (9CI) (CA INDEX

Rotation (+). Absolute stereochemistry unknown.

L7 ANSWER 103 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

82095-83-8 CAPLUS
Cyclopropanecarboxylic acid, 3-{2,2-dichloroethy1}-2,2-dimethy1-,5-methy1-2-(1-methylethy1)cyclohexyl ester, [1R-[1.alpha.(1R*,35*),2.beta.,5.alpha.]]- (9CI) (CA INDEX NAME)

RN 82095-84-9
CN Cyclopropanecarboxylic acc.,
ester,
(1R-cis)- (9CI) (CA INDEX NAME) 82095-84-9 CAPLUS Cyclopropanecarboxylic acid, 3-(2-chloroethyl)-2,2-dimethyl-, ethyl

82095-85-0 CAPLUS 82095-85-0 CAPUS Cyclopropanecarboxylic acid, 3-(2-chloroethyl)-2,2-dimethyl-, 5-methyl-2-(1-methylethyl)cyclohexyl ester, [1R-[1.alpha.(1R*,35*),2.beta.,5.alpha.]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

ANSWER 103 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued) 82095-89-4 CAPLUS

Cyclopropanecarboxylic acid, 2-hexyl-, cis-(-)- (9CI) (CA INDEX NAME)

Rotation (-). Absolute stereochemistry unknown.

82095-90-7 CAPLUS Cyclopropanecarboxylic acid, 2-methyl-2-phenyl-, cis-(+)- (9CI) (CA

Rotation (+). Absolute stereochemistry unknown.

RN 82095-91-8 CAPLUS
CN Cyclopropanecarboxylic acid, 2-methyl-2-phenyl-, cis-(-)- (9CI) (CA INDEX

Rotation (-). Absolute stereochemistry unknown.

82095-92-9 CAPLUS Cyclopropanecarboxylic acid, 2-methyl-2-phenyl-, trans-(+)- (9CI) (CA INDEX NAME)

Rotation (+). Absolute stereochemistry unknown.

82095-93-0 CAPLUS Cyclopropanecarboxylic acid, 2-methyl-2-phenyl-, trans-(-)- (9CI) (CA INDEX NAME)

Rotation (-). Absolute stereochemistry unknown.

RN 82165-94-4 CAPLUS
CN Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2,2,2-trichloroethyl)-,
5-methyl-2-(1-methylethyl)cyclohexyl ester, [IR[1.alpha.(15*,3R*),2.beta.,5.alpha.]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 82165-95-5 CAPLUS
CN Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2,2,2-trichloroethyl)-,
5-methyl-2-(1-methylethyl)cyclohexyl ester, [1R[1.alpha.(1R*,3R*),2.beta.,5.alpha.]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry

RN 82165-96-6 CAPLUS
CN Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2,2,2-trichloroethyl)-,
5-methyl-2-(1-methylethyl)cyclohexyl ester, [IR[l.alpha.(15*,35*),2.beta.,5.alpha.]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L7 ANSWER 103 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

RN 23020-15-7 CAPLUS CN Cyclopropanecarboxylic acid, 2-phenyl-, (18,28)- (9CI) (CA INDEX

Absolute stereochemistry. Rotation (+).

RN 53692-73-2 CAPLUS CN Cyclopropanecarboxylic acid, 2,2-diphenyl-, (1S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 53692-74-3 CAPLUS
CN Cyclopropanecarboxylic acid, 2,2-diphenyl-, (R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

RN 55667-40-8 CAPLUS CN Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-, (IR,3R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

RN 55701-08-1 CAPLUS

L7 ANSWER 103 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

RN 82165-97-7 CAPLUS
CN Cyclopropanecarboxylic acid, 2-(4-methoxyphenyl)-3-methyl-,
(1.alpha.,2.alpha.,3.beta.)-(+)- (9Cl) (CA INDEX NAME)

Rotation (+). Absolute stereochemistry unknown.

RN 82166-04-9 CAPLUS
CN Cyclopropanecarboxylic acid, 2-(4-methoxyphenyl)-3-methyl-,
(1.alpha.,2.alpha.,3.beta.)-(-)- (9CI) (CA INDEX NAME)

Rotation (-). Absolute stereochemistry unknown.

IT 3471-10-1P 23020-15-7P 53692-73-2P
53692-74-3P 55667-40-8P 55701-08-1P
57991-29-4P 92156-593-9P 82165-98-8P
82165-99-9P 82166-03-8P
RL: SPN (Synthetic preparation), PREP (Preparation)
(prepn. of, by stereoselective cyclopropanation reaction)
RN 3471-10-1 CAPUS
CN CyclopropaneCarboxylic acid, 2-phenyl-, (1R,2R)- (9CI) (CA INDEX
NAME)

Absolute stereochemistry. Rotation (-).

L7 ANSWER 103 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued) CN Cyclopropasecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-,(15,35)- (961) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

EN 57991-29-4 CAPLUS
CN Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-,
5-methyl-2-(1-methylethyl)cyclohexyl ester (9CI) (CA INDEX NAME)

RN 82165-93-3 CAPLUS
Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2,2,2-trichloroethyl)-,
5-methyl-2-(1-methylethyl)cyclohexyl ester, [1R[1.alpha.(1R*,3S*),2.beta.,5.alpha.]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 82165-98-8 CAPLUS CN Cyclopropanecarboxylic acid, 2-hexyl-, (1S-trans)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 82165-99-9 CAPLUS

ANSWER 103 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued) Cyclopropanecarboxylic acid, 2-hexyl-, (1R-trans)- (9CI) (CA INDEX CN NAME)

Absolute stereochemistry.

82166-00-5 CAPLUS Cyclopropanecarboxylic acid, 2,3-dipropyl-, [2S-(1.alpha.,2.alpha.,3.beta.)]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

82166-01-6 CAPLUS Cyclopropanecarboxylic acid, 2,3-dipropyl-, [1S-(1.alpha.,2.alpha.,3.beta.)]- (9CI) (CA INDEX NAME)

82166-02-7 CAPLUS 62100-02-7 CARDUS Cyclopropanecarboxylic acid, 2-(4-methoxyphenyl)-3-methyl-, (1.alpha.,2.beta.,3.alpha.)-(+)- (9CI) (CA INDEX NAME)

Rotation (+). Absolute stereochemistry unknown.

82166-03-8 CAPLUS Cyclopropanecarboxylic acid, 2-(4-methoxyphenyl)-3-methyl-, (1.alpha.,2.beta.,3.alpha.)-(-)- (9CI) (CA INDEX NAME)

L7 ANSWER 104 OF 139
ACCESSION NUMBER:
DOCUMENT NUMBER:
1982:199162 CAPLUS
95:199162
Pesticidal pentafluorobenzyl esters of cycloalkyl carboxylic acids
Holan, George O'Keefe, David Francis
Commonwealth Scientific and Industrial Research
Organization, Australia
EUR: Pat. Appl., 18 pp.
CODEN: EPXXDW
DOCUMENT TYPE:
LANGUAGE:
FAMILY ACC. NUM. COUNT:
FAMILY ACC. NUM. COUNT:
PATENT INFORMATION:
1

DOCUMENT TYPE: LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE EP 44718 A2 19820127
EP 44718 A3 19820331
EP 44718 B1 19851113
R: CH, DE, FR, GB, IT, NL
US 4390715 A 19830628
AU 543390 E2 19850418
AU 8172828 A1 19820728
ZA 8104795 A 19820728
JF 57042658 A2 19820310
PRIORITY APPLN. INFO.:
GI EP 1981-303282 19810716 US 1981-282190 AU 1981-72828 19810710 19810713 ZA 1981-4795 JP 1981-112892 AU 1980-4608

or different) are H, F] and II (R and R1 same as above) [R6, R7, R8, R9,

R10, and R11 (same or different) are H, F, Br, Cl, Me] were prepd.

they exhibited insecticidal activity. 1-(4-Ethoxyphenyl)-2,2,3,3-tetrafluorocyclobutanecarboxylic acid was treated with CGFSCH2Br and 18-crown-6 catalyst to give II (R = OEt, R6 = R7 = R8 = R9 = F, R1 = R10 = R11 = H). ST33-7-3-5 RL: RCT (Reactant)

L7 ANSWER 103 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

Rotation (-). Absolute stereochemistry unknown.

60066-94-4P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation) (prepn., sapon., and dehydrochlorination of) 60066-84-4 CAPUS (Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2,2,2-trichloroethyl)-, ΙT

ethyl

ANSWER 104 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)
(esterification of, by pentafluorobenzyl bromide, catalysts
for)
81733-73-5 CAPLUS
81733-72-4P
RL: AGR (Agricultural use), BAC (Biological activity or effector,

ot adverse); SPN (Synthetic preparation); BIOL (Biological study); FREP (Preparation); USES (Uses) (prepn. and insecticidal activity of) 81733-72-4 CAPIWS Cyclopropanecarboxylic acid, 1-(4-ethoxyphenyl)-2,2-difluoro-, (pentafluorophenyl)mathyl ester (SCI) (CA INDEX NAME)

L7 ANSWER 105 OF 139 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1981:461558 CAPLUS
DOCUMENT NUMBER: 95:61558
Asymmetric cyclopropanation of fumarates with methylene bromide catalyzed by cobalt or nickel

metalytene Studente Caladyzer by Cobart of Complexes
Matsuda, Hideki/ Kanai, Hiroyoshi
Fac. Eng., Kyoto Univ., Kyoto, 606, Japan
Chem. Lett. (1981), (3), 395-6
CODEN: CMLTAG/ ISSN: 0366-7022 AUTHOR(S): CORPORATE SOURCE: SOURCE:

DOCUMENT TYPE: LANGUAGE: GI

AB RR- And SS-trans-1,2-cyclopropanedicarboxylic acids (I; R = H) were prepd.

by cyclopropanation of trans-ROZCCH:CHCOZR [R = (-)-menthyl, (-)- and (+)-bornyl] with CH2Br2 over CoCl2 or NiBr2 with subsequent sapon. (+)-bornyl] with CHZB12 GVG.

of the
chiral diesters I (same R).

IT 78349-06-12 78349-07-2P 78932-60-6P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)
(prepn. and sapon. of)
RN 78349-06-1 CAPLUS
CN 1,2-Cyclopropanedicarboxylic acid, bis[5-methyl-2-(1methylethyl)cyclohexyl] ester,
[1R-[1.alpha.[1R*,2R*(1R*,2S*,5R*)],2.beta.
,5.alpha.]]- (9CI) (CA INDEX NAME)

RN 78349-07-2 CAPLUS
CN 1,2-Cyclopropanedicarboxylic acid,
bis(1,7,7-trinethylbircyclo[2,2.1]hept-2yl) ester, [IR-[1.alpha.,2.beta.[15*,25*(IR*,25*,5R*)],5.alpha.]](9C)

(CA INDEX NAME)

ANSWER 105 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

RN 78392-60-6 CAPLUS
CN 1,2-Cyclopropanedicarboxylic acid,
bis(1,7,7-trimethylbicyclo[2.2.1]hept-2y1 ester, [1S-[1.alpha.,2.beta.[1S*,2S*(1R*,2S*,4R*)],4.alpha.]](9C1)

(CA INDEX NAME)

14590-54-6P 34202-45-4P
RL: SPN (Synthetic preparation), PREP (Preparation)
(prepn. of)
14590-54-6 CAPLUS
1,2-Cyclopropanedicarboxylic acid, (1S-trans) - (9CI) (CA INDEX NAME)

Absolute stereochemistry.

34202-45-4 CAPLUS
1,2-Cyclopropanedicarboxylic acid, (1R-trans)- (9CI) (CA INDEX NAME)

olute stereochemistry.

L7 ANSWER 106 OF 139
ACCESSION NUMBER:
DOCUMENT NUMBER:
S1981:442461 CAPLUS
S142461
Vinylcyclopropane derivatives
Fayter, Richard G., Jr., White, John F.; Harris,
Eugene G.
Eugene G.
DOCUMENT TYPE:
LANGUAGE:
LANGUAGE:
FAMILY ACC. NUM. COUNT
1

FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 4252739	A	19810224	U\$ 1979-68135	19790820
EP 25846	A1	19810401	EP 1980-104651	19800806
EP 25846	B1	19840307		
R: BE, CH,	DE, FR	, GB, NL		
CA 1154789	A1	19831004	CA 1980-357951	19800811
JP 56045425	A2	19810425	JP 1980-112757	19800818
JP 01059253	B4	19891215		
BR 8005243	A	19810304	BR 1980-5243	19800819
PRIORITY APPLN. INFO	. :		US 1979-68135	19790820
AB The reaction of	RCR1R20	CR3: CR4CR5R6F	R (R = halo, mesyl,	tosyl, brosyl,
PhS03, 4-02NC6H	4CO2, CI	F3SO3; R1, R2	2, R3, R4, R5, and F	6 are H.
alkyl) with				

activated methylene compds. was catalyzed by group VA or VIA element

Compds. and gave vinylcyclopropanes. Thus, trans-CICH2CH:CHCH2Cl was treated with CH2(CO2Et)2, Me(CH2)15F+Bu3 Br-, and XOH to give di-Et 2-vinylcyclopropane-1,1-dicarboxylate. 7686-78-4P 33626-78-8P 65590-89-8P 78162-08-0P
RL: SPN (Synthetic preparation); PREP (Preparation)

(prepn. of) 7686-78-4 CAPLUS

1,1-Cyclopropanedicarboxylic acid, 2-ethenyl-, diethyl ester (9CI)

INDEX NAME)

33626-79-8 CAPLUS Cyclopropanecarboxylic acid, 1-acetyl-2-ethenyl-, ethyl ester (9CI)

INDEX NAME)

ANSWER 106 OF 139 CAPLUS COPYRIGHT 2002 ACS

65590-89-8 CAPLUS Cyclopropanecarboxylic acid, 1-cyano-2-ethenyl-, ethyl ester (9CI)

INDEX NAME)

RN 78162-06-8 CAPLUS
CN 1,1-Cyclopropanedicarboxylic acid, 2-ethenyl-, bis(1-methylethyl) ester

(9CI) (CA INDEX NAME)

78162-08-0 CAPLUS 1,1-Cyclopropanedicarboxylic acid, 2-ethenyl-, dibutyl ester (9CI)

INDEX NAME)

78162-15-9 CAPLUS Cyclopropanecarboxylic acid, 2-ethenyl-1-phenyl-, ethyl ester (9CI)

1.7 ANSWER 106 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued) INDEX NAME)

$$Ph$$
 $CH = CH_2$

RN CN NAME) 78162-18-2 CAPLUS Cyclopropanecarboxylic acid, 1-cyano-2-ethenyl- (9CI) (CA INDEX

78162-19-3 CAPLUS Cyclopropanecarboxylic acid, 1-cyano-2-ethenyl-, 4-chloro-2-butenyl ester (9CI) (CA INDEX NAME)

ACCESSION NUMBER: DOCUMENT NUMBER:

ANSWER 108 OF 139 CAPLUS COPYRIGHT 2002 ACS
SSSION NUMBER: 1981:191780 CAPLUS
MENT NUMBER: 94:191780 CAPLUS
LE: 2-(2',2',2'-Trihaloethyl)-4-halocyclobutan-1-ones
BNTOR(S): Bellus, Daniel; Greuter, Hans; Martin, Pierre;
Steiner, Eqinhard
CMT ASSIGNEE(S): Ciba-Geigy Corp., USA
U.S., 15 pp. Cont.-in-part of U.S. Ser. No.
412. TITLE: INVENTOR(S):

PATENT ASSIGNEE(S):

SOURCE: 891,412,

abandoned. CODEN: USXXAM

Patent English

DOCUMENT TYPE: LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 4242278	A	19801230	US 1978-948126	19781003
CH 644342	A	19840731	CH 1978-1974	19780223
GB 1601553	A	19811028	GB 1978-31151	19780330
CH 637100	A	19830715	CH 1978-9992	19780925
IL 60782	A1	19840229	IL 1980-60782	19800807
US 4322374	A	19820330	US 1980-181015	19800825
PRIORITY APPLN. INFO.	:		CH 1977-4071	19770331
			CH 1977-14404	19771124
			CH 1978-1974	19780223
			US 1978-891412	19780329
			CH 1978-9992	19780925
			GB 1978-12557	19780330
			IL 1978-54395	19780330
			US 1978-948126	19781003
GI				

AB The title compds. I (X = Br, Cl; R1, R2 = H, Me, R1R2 = C2-4 alkylene; R3

lener M3 = Br, Cl), useful as intermediates to insecticidal dihalovinylcyclopropanecarboxylic acids, were prepd. by

dihaiovinyidyelypiopiatoni...,
cyclocondensation
of RIRZC:CHIZ with CK3CHZCHR3COCI. Thus, heating CCl3CHZCHClCoCl with
isobutene in cyclohexane contg. Et3N at 65.degree. 7 h gave 60% I

(R1 = R2 = Me, X = R3 = C1) (II). Treating II and similar I with aq. NaOH

gave dihalovinylcyclopropanecarboxylic acid derivs.
IT 52315-07-8P 52645-53-1P 59042-49-8P 59042-50-1P 61282-80-2P 63538-10-3P 63577-73-9P 63710-57-6P 64628-80-4P 68697-20-1P

L7 ANSWER 107 OF 139 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1981:208401 CAPLUS
DOCUMENT NUMBER: 94:208401
TITLE: Bichlorobis(organonitrile)palladium(II) catalysis

cis to trans isomerization of ethyl chrysanthemate and

chrysanthemic acid Williams, Jimmie L., Rettig, Michael F. Dep. Chem., Univ. California, Riverside, CA, AUTHOR(S): CORPORATE SOURCE: 92521,

SOURCE: USA
SOURCE: TETA DETAIL (1981), 22(5), 385-8
CODEN: TELEAY; ISSN: 0040-4039
DOCUMENT TYPE: Journal
LANGUAGE: English
AB R2PdC12 (R = MeCN, EtCN, PhCN) in C6H6 or CHCl3 act as homogeneous catalysts in the room temp. cis-trans isomerization of Et chrysanthemate and chrysanthemic acid.

1 1259-78-6
R1: RCT (Reactant)
(cis-trans isomerization of, palladium complex-catalyzed)
RN 15259-78-6 CAPLUS
IT 027-90-79 1802-02-49
RL: STN (Synthetic preparation); PREP (Preparation)
(prepn. of, by palladium complex-catalyzed isomerization of cis

isomer)
RN 827-90-7 CAPLUS
RN 1802-02-4 CAPLUS
CN Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2-methyl-1-propenyl)-, ethyl

ester, (1R,3R)-rel- (9CI) (CA INDEX NAME)

ANSWER 108 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued) RL: SPN (Synthetic preparation); PREP (Preparation)

(prepn. of)
52315-07-8 CAPLUS
Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-,
cyano(3-phenoxyphenyl)methyl ester (9CI) (CA INDEX NAME)

52645-53-1 CAPLUS Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-, (3-phenoxyphenyl)methyl ester (9CI) (CA INDEX NAME)

59042-49-8 CAPLUS Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-,(1R,3R)-rel- (9CI) (CA INDEX NAME)

H02C

59042-50-1 CAPLUS Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-, (1R,35)-rel- (9C1) (CA INDEX NAME)

Relative stereochemistry.

61282-80-2 CAPLUS Cyclopropanecarboxylic acid, 2-{2,2-dichloroethenyl}-3-methyl- (9CI) íCA

INDEX NAME)

63538-10-3 CAPLUS Cyclopropanecarboxylic acid, 3-(2,2-dibromoethenyl)-2,2-dimethyl-, (1R,3S)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

63597-73-9 CAPLUS CAPLUS (Cyclopropanecarboxylic acid, 3-(2,2-dibromoethenyl)-2,2-dimethyl-, (1R,3R)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

63710-57-6 CAPLUS Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2,2,2-trichloroethyl)-, RN CN cis-(9CI) (CA INDEX NAME)

Relative stereochemistry.

64628-80-4 CAPLUS Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-, 1-(3-phenoxyphenyl)ethyl ester (9CI) (CA INDEX NAME)

L7 ANSWER 109 OF 139 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1981:156367 CAPLUS
DOCUMENT NUMBER: 94:156367
Stereoselective synthesis of optically active dictyopterenes A and B and their geometrical

isomers AUTHOR(S):

Kajiwara, Tadahiko; Nakatomi, Toshihiro; Sasaki, Yasushi; Hatanaka, Akikazu Dep. Agric. Chem., Univ. Yamaguchi, Yamaguchi,

CORPORATE SOURCE: 753,

Japan Agric. Biol. Chem. (1980), 44(9), 2099-104 CODEN: ABCHA6; ISSN: 0002-1369 Journal English

SOURCE:

DOCUMENT TYPE: LANGUAGE: GI

CH: CH2 I

AB Optically active dictyopterenes A (I; R = E-CH:CHBu) and B (I; R = E,Z-CH:CHCH:CHEt) and their geometrical isomers were stereoselectively prepd. by condensing acrolein with EtO2CCH2S+Me2.Br- or by Wittig reaction of (+)-I (R = CHO), derived from partially resolved (.+-.)-(15,2R)-I

CO2H), with phosphonium salts in liq-solid 2-phase systems using

ethers.
IT 77210-35-6P

//Z10-35-0F RE: SPN (Synthetic preparation); PREP (Preparation)
(prepn. and detn. of the abs. configuration of)
77210-35-6 CAPLUS
Cyclopropanecarboxylic acid, 2-ethenyl-, (15,2R)- (9CI) (CA INDEX

Absolute stereochemistry. Rotation (+).

77183-93-6P RL: RCT (Reactant): SPN (Synthetic preparation): PREP (Preparation) (prepn. and oxidn. of) 77183-93-8 CAPLUS 77210-36-7P IT

RL: RCT (Reactant): SPN (Synthetic preparation): PREP (Preparation)

L7 ANSWER 108 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

68697-20-1 CAPLUS Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2,2,2-trichloroethyl)-, trans-(9CI) (CA INDEX NAME)

Relative stereochemistry.

ANSWER 109 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued) (prepn. and redn. of) 77210-36-7 CAPLUS Cyclopropanecarboxylic acid, 2-ethenyl-, methyl ester, (IS-trans)-

(CA INDEX NAME)

Absolute stereochemistry.

ΙT

77210-34-5P
RL: SPN (Synthetic preparation); PREP (Preparation)
 (prepn. and resoln. of)
77210-34-5 CAPLUS
77183-94-9P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)
 (prepn. and sapon. of)
77183-94-9 CAPLUS
38206-81-4P
RL: SPN (Synthetic preparation); PREP (Preparation)
 (prepn. of)
38206-81-4 CAPLUS
Cyclopropanecarboxylic acid, 2-ethenyl-, (1R-trans)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

77183-91-6P 77183-92-7P RL: RCT (Reactant): SPN (Synthetic preparation); PREP (Preparation) (prepn., redn., and Wittig reaction of) 77183-91-6 CAPULS 77183-92-7 CAPULS

L7 ANSWER 110 of 139 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1981:121308 CAPLUS
DOCUMENT NUMBER: 94:121308
TITLE: Benzylpytrolylmethyl esters of cyclopropane

carboxylic

INVENTOR(S): PATENT ASSIGNEE(S):

acids
Henrick, Clive A.
Zoecon Corp., USA
U.S., 5 pp. Cont.-in-part of U.S. Ser. No.

SOURCE: 942,509. CODEN: USXXAM

DOCUMENT TYPE: LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION: Patent English 3

APPLICATION NO. PATENT NO. KIND DATE DATE US 4229352 US 4198527 PRIORITY APPLN. INFO.: US 1979-66263 US 1978-942509 US 1978-942509 19790813 19780915 19780915

AB Pesticides (no data), benzylpyrrolylmethyl cyclopropanecarboxylates I (R = H, F, Br, Cl, CF3, Me, MeO, MeS; Rl = lower alkyl, lower haloalkyl,

alkenyl, lower haloalkenyl, substituted phenyl; R2 = lower alkyl, halo; R3 = H, lower alkyl, halo; Z = O, S) were prepd. by the reaction of the

acid

chloride and alc. in an org. solvent over a basic catalyst or
the reaction of the acid and the benzyl halide deriv. in an org.

solvent
in the presence of a base. Thus, 3-(4-chlorophenoxy)-2,2dimethylcyclopropanecarboxylic acid was treated with SO2C12 and the
acid

acid chloride was treated with 3-benzylpyrrolylmethyl alc. in the

(dimethylamino)pyridine in C6H6 at 25.degree. for 18 h to give I (R = H, R1 = 4-C1C6H4, R2 = R3 = Me, Z = 0).

IT 71279-94-2

INDEX

71279-94-2
RL: RCT (Reactant)
(acylation by, of benzylpyrrolylmethyl alc.)
71279-9-2 CAPLUS
Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(pentyloxy)- (9CI) (CA

ANSWER 110 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued) [3-(phenylmethyl)-1H-pyrrol-1-yl]methyl ester (9CI) (CA INDEX NAME)

76827-16-2 CAPLUS

Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2,2,2-trifluoroethoxy)-[3-(phenylmethyl)-1H-pyrrol-1-yl]methyl ester (9CI) (CA INDEX NAME)

76827-17-3 CAPLUS

76827-17-3 CAPLUS
Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(pentyloxy)-,
[3-(phenylmethyl)-1H-pyrrol-1-yl]methyl ester (9CI) (CA INDEX NAME)

ANSWER 110 OF 139 CAPLUS COPYRIGHT 2002 ACS NAME)

5842-37-5
RL: RCT (Reactant)
(chlorination of)
5842-37-5 CAPLUS
Cyclopropanecarboxylic acid, 3-(4-chlorophenoxy)-2,2-dimethyl- (9CI)

76827-13-99 76827-14-0P 76827-15-2P
76827-17-3P 76827-18-4P 76827-19-5P
RL: SPN (Synthetic preparation); PREF (Preparation)
(prepn. of)
76827-13-9 CAPLUS
Cyclopropanecarboxylic acid, 3-(4-chlorophenoxy)-2,2-dimethyl-,
[3-(phenylmethyl)-1H-pyrrol-1-yl]methyl ester (9CI) (CA INDEX NAME)

76827-14-0 CAPLUS Cyclopropanecarboxylic acid, 3-(4-fluorophenoxy)-2,2-dimethyl-,

L7 ANSWER 110 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

RN 76827-18-4 CAPLUS
CN Cyclopropanecarboxylic acid, 2,2-dimethyl-3-propoxy-,
[3-(phenylmethyl)-1Hpyrrol-1-yl]methyl ester (9CI) (CA INDEX NAME)

76827-19-5 CAPLUS

/OBZ/-19-3 CAPLUS Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(pentyloxy)-, [3-[(4-fluorophenyl)methyl]-1H-pyrrol-1-yl]methyl ester (9CI) (CA INDEX

(CA INDEX NAME)

76694-87-6
RL: RCT (Reactant)
(reaction of, with benzylpyrrolylmethyl methanesulfonate)
76694-87-6 CAPLUS
Cyclopropanecarboxylic acid, 3-(4-fluorophenoxy)-2,2-dimethyl- (9CI) (CA

INDEX NAME)

L7 ANSWER 111 OF 139 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1981:121128 CAPLUS
DOCUMENT NUMBER: 94:121128
CYANGYDYIN esters by reacting a carboxylic acid anhydride with an alkali metal cyanide and an

alkali

metal borohydride Photis, James M. Stauffer Chemical Co., USA U.S., 5 pp. CODEN: USXXAM Patent English 1

INVENTOR(S):
PATENT ASSIGNEE(S):
SOURCE:

DOCUMENT TYPE: LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE

US 4234508 A 19801118 US 1979-80957 19791001

AB The title process, using an aq. Bu4N+ Br- phase transfer-catalyzed procedure, was used to prep., e.g.,

(R.S)-, alpha-cyano-3-phenoxybenzyl

(cis,

(cis, trans)-3-(2,2-dichloroviny1)-2,2-dimethylcyclopropanecarboxylate, a known insecticide, from the anhydride of 3-PhOC6H4CO2H with dichlorochrysanthemic acid.

IT 76925-90-1P

76925-90-1P
RL: RCT (Reactant); SFN (Synthetic preparation); PREP (Preparation) (prepn. and reaction with borohydride and cyanide)
76925-90-1 CAPLUS
Benzoic acid, 3-phenoxy-, anhydride with 3-(2,2-dichloroethenyl)-2,2-dimethylcyclopropanecarboxylic acid (9CI) (CA INDEX NAME)

11 52315-07-BP

RL: SPN (Synthetic preparation), PREP (Preparation) (prepn. of)
52315-07-8 CAPLUS

S2313-01-8 CARLOS (Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-, cyano(3-phenoxyphenyl)methyl ester (9CI) (CA INDEX NAME)

55701-05-8 IT

L7 ANSWER 111 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)
R1: RCT (Reactant)
(reaction of, with phenoxybenzoyl chloride)
RN 55701-05-8 CAPLUS
CN Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl(9C1)

(CA INDEX NAME)

L7 ANSWER 112 OF 139 CAPLUS COPYRIGHT 2002 ACS ACCESSION NUMBER: 1980:567825 CAPLUS DOCUMENT NUMBER: 93:167825

DOCUMENT NUMBER: TITLE:

93:16/825 A new rapid esterification procedure utilizing exceptionally mild reaction conditions

Gundu

AUTHOR(S): CORPORATE SOURCE: 47907,

Rao, C. Gundu Dep. Chem., Purdue Univ., West Lafayette, IN,

USA Org. Prep. Proced. Int. (1980), 12(3-4), 225-8 CODEN: OPPIAK, ISSN: 0030-4948 SOURCE:

DOCUMENT TYPE: JOURNEL LANGUAGE: English
ABS Stirring BzOH in MeCN with 1,5-diazabicyclo[5.4.0]undec-5-ene and MeI 1 h

MeI 1 h
at room temp. gave 97% BzCMe. Me and Et esters of hexanoic,
cyclopropanecarboxylic, cyclohexanecarboxylic, anisic, mesitoic,
pivalic,
3-butenoic, and 4-(dimethylamino)benzoic acids were similarly prepd.

in

85-97% yields.
1759-53-1
RL: RCT (Reactant)
(esterification of, by Me iodide)
1759-53-1 CAPUS
Cyclopropanecarboxylic acid (6CI, 7CI, 8CI, 9CI) (CA INDEX NAME)

IT 2868-37-3P

RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of, by esterification in the presence of
diazabicycloundecene;
RN 2868-37-3 CAPLUS
CN Cyclopropanecarboxylic acid, methyl ester (6CI, 7CI, 8CI, 9CI) (CA
INDEX
INDEX NAME)

L7 ANSWER 113 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued) of a Cu catalyst gave I (R = H, Rl = CCl3), which was treated with Zn powder in ROAc-Et20 to give II (R2 = Cl). Analogous reaction of (R)-III gave (R)-IV which was cyclized in the presence of chiral binuclear

Cu catalyst to eventually give (lR,3R)-II (R2 = Cl).

T5667-40-99 F5701-02-59 F9213-08-0P
63597-73-99
RL: SPN (Synthetic preparation); PREP (Preparation) (prepn. of)
RN 55667-40-8 CAPLUS
CN Cyclopropanacarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-, (lR,3R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

55701-02-5 CAPLUS Cyclopropanecarboxylic acid, 3-formyl-2,2-dimethyl-, methyl ester, (IR,35)- (9C1) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

59213-08-0 CAPLUS Cyclopropanaczarboxylic acid, 3-(2,2-dichlorcethenyl)-2,2-dimethyl-, 1-methylheptyl ester (9CI) (CA INDEX NAME)

63597-73-9 CAPLUS

OSS97-/3-9 CAPLUS CYCLOPOPANEARDOXYLIC acid, 3-(2,2-dibromoethenyl)-2,2-dimethyl-, (1R,3R)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

L7 ANSWER 113 OF 139 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1980:215260 CAPLUS
DOCUMENT NUMBER: 92:215260
Insecticide intermediates
Hatch, Charles Eldrige; Kondo, Kiyoshi; Takashima,
Toshiyuki; Tunemoto, Dalei
FOUNCE: FKC Corp., USA
EUr. Pat. Appl., 45 pp.
COEN: EFXXDW
DOCUMENT TYPE: Patent

DOCUMENT TYPE: Patent English 2 LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

	PA:	TENT NO.		KIND	DATE		AP	PLICATION NO.	DATE
	EP	3666		A1			EP	1979-300173	19790202
	EP	3666		B1					
		R: BE,	CH,	DE, FR	, GB, LU,	NL			
	US	4526987		A	19850702		US	1979-736	19790103
	CA	1258864		A1	19890829		CA	1979-320114	19790123
	IL	56507		A1	19840131		ΙL	1979-56507	19790126
	IL	66043		A1	19840131		IL	1979-66043	19790126
	IL	66044		A1	19840131		IL	1979-66044	19790126
	DK	7900474		A	19790807		DK	1979-474	19790205
	HU	25874			19830829		HU	1979-FE1037	19790205
	HU	182955		В	19840328				
	JP	59030710		B4	19840728		JP	1979-11925	19790206
		54115315		A2	19790907				
		59172437		A2	19840929		JP	1983-132988	19830722
		62003137		B4	19870123				
таа		Y APPLN.			150,0120	IIS	10	78-875648	19780206
· M	OKII	I ALL DIV.	21110	•				78-875649	19780206
								79-736	19790103
								79-56507	19790103
						11.	19	/3-3030/	13/30120

GI

Lactones I (R = H, alkoxycarbonyl; R1 = H, CBr3, CCl3; R = R1 .noteq.

H),
intermediates in the prepn. of insecticidal (no data)
cyclopropanecarboxylates II (R2 = Br, Cl), were prepd. Thus,
treatment at
He2C:CHCH(OH) CCl3 (III) with diketene gave MeCOCH2CO2CH(CCl3) CH:CMe2,
which reacted with tosyl azide in MeCN and then with NaOH to give
NZCHCO2CH(CCl3) CH:CMe2 (IV). Carbenoid cyclization of IV in the

ANSWER 113 OF 139 CAPLUS COPYRIGHT 2002 ACS

L7 ANSWER 114 OF 139 CAPLUS COPYRIGHT 2002 ACS ACCESSION NUMBER: 1980:5888 CAPLUS DOCUMENT NUMBER: 92:5888

DOCUMENT NUMBER: TITLE:

92:5888
Substituent effect in the ionization of cis-2-substituted 1-cyclopropanecarboxylic acids Kusuyama, Yoshiaki
Fac. Educ., Wakayama Univ., Wakayama, 640, Japan Bull. Chem. Soc. Jpn. (1979), 52(7), 1944-9
CODEN: BCSJA8: ISSN: 0009-2673 AUTHOR(S): CORPORATE SOURCE: SOURCE:

DOCUMENT TYPE:

LANGUAGE:

AB I (R = H, Me, Ph, MeO, EtO, Cl, Br, Ac, OAc, EtO2C) were prepd., and their pKs were detd. in water at 25.degree.C, along with those of II. The values for I are larger than those for II except for the chloro and bromo derivs. The substituent effects obtained were in the usual order in sense of the electronic effects, except for Ph, which produced a decrease
in acidity relative to the unsubstituted acid. 13C NMR chem. shifts the methylene C atom of the Et group in the Et ester of I in CDC13

the methylens gave an
LFER with the I pKa.

IT 5365-14-0 5365-17-3
RL: RCT (Reactant)
(esterification of, with methanol and sulfuric acid)
RN 5365-14-0 CAPLUS
CN Cyclopropanecarboxylic acid, 2,2-dichloro- (6CI, 7CI, 8CI, 9CI) (CA INDEX

5365-17-3 CAPLUS Cyclopropanecarboxylic acid, 2,2-dibromo- (6CI, 7CI, 8CI, 9CI) (CA INDEX NAMEL

ANSWER 114 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

60212-40-0 CAPLUS Cyclopropanecarboxylic acid, 2-bromo-, trans- (9CI) (CA INDEX NAME) Relative stereochemistry.

60212-41-1 CAPLUS Cyclopropanecarboxylic acid, 2-ethoxy-, trans- (9CI) (CA INDEX NAME) Relative stereochemistry.

60212-42-2 CAPLUS Cyclopropanecarboxylic acid, 2-methoxy-, trans- (9CI) (CA INDEX CN NAME)

Relative stereochemistry.

60212-43-3 CAPLUS Cyclopropanecarboxylic acid, 2-acetyl-, trans- (9CI) (CA INDEX NAME) Relative stereochemistry.

65475-70-9 CAPLUS Cyclopropanecarboxylic acid, 2-chloro-, trans- (9CI) (CA INDEX NAME)

L7 ANSWER 114 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

939-90-2 6202-94-4 31420-66-3 52920-02-2 80212-40-0 50212-61-1 60212-42-2 60212-43-3 65475-70-9 RL: PRP (Properties) (pKa of, pKa of cis isomer vs.) 939-90-2 CAPLUS Cyclopropanecarboxylic acid, 2-phenyl-, {1R,2R}-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

6202-94-4 CAPLUS Cyclopropanecarboxylic acid, 2-methyl-, (1R,2R)-rel- (9C1) (CA INDEX NAME)

Relative stereochemistry.

1,2-Cyclopropanedicarboxylic acid, monoethyl ester, (1R,2R)-rel- (9CI) (CA INDEX NAME) 31420-66-3 CAPLUS

Relative stereochemistry.

52920-02-2 CAPLUS 1,2-Cyclopropanedicarboxylic acid, monomethyl ester, (1R,2R)-rel-(CA INDEX NAME)

Relative stereochemistry.

L7 ANSWER 114 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued) Relative stereochemistry.

71666-01-8P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation) (prepn. and dehydrobromination of, by tributyltin hydride in

presence of azobisisobutylnitrile)
RN 71666-01-8 CAPIUS
CN cyclopropanecarboxylic acid, 2,2-dibromo-, methyl ester (9CI) (CA NAME)

939-89-9P 1759-53-1P 6142-57-0P 18180-59-1P 31191-77-2P 31420-47-0P 71666-03-0P 71666-04-1P 71666-05-2P 71666-05-3P

71666-06-3P
RL: SPN (Synthetic preparation): PREP (Preparation)
(prepn. and pKa of, substituent effect in relation to)
939-89-9 CAPLUS
Cyclopropanecarboxylic acid, 2-phenyl-, (1R,2S)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

1759-53-1 CAPLUS Cyclopropanecarboxylic acid (6CI, 7CI, 8CI, 9CI) (CA INDEX NAME)

RN 6142-57-0 CAPLUS CN cyclopropanecarboxylic acid, 2-methyl-, cis- (8CI, 9CI) (CA INDEX NAME) 6142-57-0 CAPLUS

L7 ANSWER 114 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued) Relative stereochemistry.

RN 18180-59-1 CAPLUS CN Cyclopropanecarboxylic acid, 2-acetyl-, cis- (8CI, 9CI) (CA INDEX NAME)

Relative stereochemistry.

31191-77-2 CAPLUS Cyclopropanecarboxylic acid, 2-bromo-, cis- (8CI, 9CI) (CA INDEX

Relative stereochemistry.

RN 31420 CN 1,2-Cycloptor (9CI) (CA INDEX NAME) 31420-47-0 CAPLUS 1,2-Cyclopropanedicarboxylic acid, monomethyl ester, (1R,2S)-rel-

71666-03-0 CAPLUS Cyclopropanecarboxylic acid, 2-methoxy-, cis- {9CI} (CA INDEX NAME) Relative stereochemistry.

L7 ANSWER 114 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

RN 71666-02-9 CAPLUS CN Cyclopropanecarboxylic acid, 2-bromo-, methyl ester, cis- (9CI) (CA INDEX NAME)

Relative stereochemistry.

L7 ANSWER 114 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

71666-04-1 CAPLUS Cyclopropanecarboxylic acid, 2-ethoxy-, cis- (9CI) (CA INDEX NAME) Relative stereochemistry.

71666-05-2 CAPLUS 1,2-Cyclopropanedicarboxylic acid, monoethyl ester, (1R,25)-rel- (9CI) (CA INDEX NAME)

71666-06-3 CAPLUS Cyclopropanecarboxylic acid, 2-chloro-, cis- (9CI) (CA INDEX NAME) Relative stereochemistry.

65475-65-2P 71666-02-9P
RL: RCT (Reactant): SPN (Synthetic preparation): PREP (Preparation)
(prepn. and sapon. of)
65475-65-2 CAPLUS
Cyclopropanecarboxylic acid, 2-chloro-, methyl ester, cis- (9CI) (CA
INDEX NAME)

Relative stereochemistry.

L7 ANSWER 115 OF 139
ACCESSION NUMBER:
DOCUMENT NUMBER:
1979:610918 CAPLUS
1979:610918 CAPLUS
11TILE:
Halogenated butyric acid chloride
Hartin, Pierrer Steiner, Eginhard
Ciba-Geigy A.-G., Switz.
COEMS:
DOCUMENT TYPE:
DOCUMENT TYPE:
DAGGEORY
FAMILY ACC. NUM. COUNT:
PATENT INFORMATION:
1979:610918 CAPLUS
1979:610918 C

DOCUMENT TYPE: LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 2206	A1	19790613	EP 1978-101377	19781116
R: BE, CH,	DE. FP	R, GB, NL		
BR 7807708	À	19790731	BR 1978-7708	19781123
ES 475346	A1	19791016	ES 1978-475346	19781123
ZA 7806606	A	19791031	ZA 1978-6606	19781123
DD 140248	C	19800220	DD 1978-209276	19781123
AT 7808366	A	19800615	AT 1978-8366	19781123
AT 360500	В	19810112		
SU 812165	A3	19810307	SU 1978-2690456	19781123
JP 54081215	A2	19790628	JP 1978-144355	19781124
PRIORITY APPLN. INFO	. :		CH 1977-14405	19771124
			CH 1978-11075	19781026
			CU 1077-14406	10771124

CH 1977-14406 19771124

RRICCICH2CC12COC1 (R = F, R1 = H or F; R = C1, R1 = H or C1) were by the addn. reaction of CC13COR2 (R2 = C1, OH or alkowy) with RRICCIR12 in

the presence of one or more of CuCl, CuCl2, CuBr, CuBr2 or Cu powder

catalyst, followed by treatment with a chlorinating agent when R2 = OH or alkowy. Thus, CC12:CH2 was added to CC13CO2Me in MeCN in the presence of CuCl to give C13CCH2CC12CO2Me, which gave C13CCH2CC12COC1

nogu

IT

heating 40 h with concd. HCl. 52315-07-8P 59042-49-8P 59042-50-1P 60310-22-9 RL: SPN (Synthetic preparation), PREP (Preparation)

(preph. of)
52315-07-8 CAPLUS
Cyclopropanecarboxylic acid, 3-{2,2-dichloroethenyl}-2,2-dimethyl-,
cyano(3-phenoxyphenyl)methyl ester (9CI) (CA INDEX NAME)

59042-49-8 CAPLUS Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-,

ANSWER 115 OF 139 CAPLUS COPYRIGHT 2002 ACS (1R,3R)-rel- (9CI) (CA INDEX NAME) (Continued)

Relative stereochemistry.

59042-50-1 CAPLUS

Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-, (1R,3S)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

60310-82-9 CAPLUS Cyclopropanecarboxylic acid, 3-(2-chloroethenyl)-2,2-dimethyl- (9CI) (CA INDEX NAME)

ANSWER 116 OF 139 CAPLUS COPYRIGHT 2002 ACS 9CI) (CA INDEX NAME) (Continued)

NAME)

20121-71-5 CAPLUS Cyclopropanecarboxylic acid, 1-ethyl-, ethyl ester (8CI, 9CI) (CA

RN 71441-76-4 CAPLUS
CN Cyclopropanecarboxylic acid, 1-methyl-, ethyl ester (6CI, 9CI) (CA INDEX NAME)

71441-77-5 CAPLUS Cyclopropanecarboxylic acid, 2-methyl-, methyl ester (6CI, 7CI, 9CI) INDEX NAME)

L7 ANSWER 116 OF 139 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1979:540408 CAPLUS
DOCUMENT NUMBER: 91:140408
TITLE: Cyclization of .gamma.-chlorocarboxylic acid

esters INVENTOR(S): PATENT ASSIGNEE(S): Schwarze, Werner: Kleemann, Axel
Deutsche Gold- und Silber-Scheideanstalt vormRoessler, Fed. Rep. Ger.
Ger. Offen., 10 pp.
CODEN: GWXXEX
Patent
German

SOURCE:

DOCUMENT TYPE:

LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	DE 2751133	A1	19790517	DE 1977-2751133	19771116
	NL 7808602	A	19790518	NL 1978-8602	19780818
	GB 2008110	A	19790531	GB 1978-43736	19781108
	FR 2409255	A1	19790615	FR 1978-31874	19781110
	BE 872029	A1	19790514	BE 1978-46669	19781114
	JP 54079254	A2	19790625	JP 1978-139480	19781114
RIC	RITY APPLN. INFO.	:		DE 1977-2751133	19771116

RITY APPLN. INFO::

Cyclopropanecarboxylate esters were prepd. by cyclization of

.gamma.-chloro aliph. esters in the presence of Na or X alcoholates.

Thus, CICH2CH2CHMeCOZEt added slowly to MeONa in PhMe with removal of

6887-83-8 CAPLUS Cyclopropanecarboxylic acid, 1-methylethyl ester (9CI) (CA INDEX CN NAME)

RN CN 8CI, 16783-11-2 CAPLUS Cyclopropanecarboxylic acid, 2,2-dimethyl-, ethyl ester (6CI, 7CI,

L7 ANSWER 117 OF 139
ACCESSION NUMBER:
DOCUMENT NUMBER:
TITLE:
CITY OF 139
ACTION OF 139
ACCESSION NUMBER:
DOCUMENT ASSIGNEE(S):
DOCUMENT TYPE:
LANGUAGE:
DOCUMENT TYPE:
LANGUAGE:
DOCUMENT TYPE:
LANGUAGE:
FATER ACCINING COUNTY

CONTROL OF 159
ACCINING COUNTY

CONTROL OF 159
ACCINING COUNTY

CONTROL OF 159
ACCINING COUNTY

CONTROL OF 159
ACCINING COUNTY

CONTROL OF 159
ACCINING COUNTY

ACCINING COUNTY

CONTROL OF 159
ACCINING COUNTY

CONTROL OF 159
ACCINING COUNTY

DOCUMENT TYPE:
CONTROL OF 159
ACCINING COUNTY

CONTROL OF 159
ACCINING COUNTY

CONTROL OF 159
ACCINING COUNTY

DOCUMENT TYPE:
CONTROL OF 159
ACCINING COUNTY

CONTROL OF 159
ACCINING COUNTY

DOCUMENT TYPE:
CONTROL OF 159
ACCINING COUNTY

CONTROL OF 159
ACCINING COUNTY

DOCUMENT TYPE:
CONTROL OF 159
ACCINING COUNTY

CONTROL OF 159
ACCINING COUNTY

DOCUMENT TYPE:
CONTROL OF 159
ACCINING COUNTY

ACCINING COUNTY

CONTROL OF 159
ACCINING COUNTY

CONTROL OF 159
ACCINING COUNTY

ACCINING COUNTY

CONTROL OF 159
ACCINING COUNTY

ACCINING CO

DOCUMENT TYPE: LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

KIND	DATE	APPLICATION NO.	DATE
A1	19780928	DE 1978-2810098	19780308
A	19791003	GB 1977-10401	19770311
A	19790228	ZA 1978-1136	19780227
A1	19790906	AU 1978-33779	19780302
B2	19811126		
A	19780913	NL 1978-2644	19780310
A1	19781006	FR 1978-6971	19780310
A2	19781011	JP 1978-27564	19780310
A	19830114	CH 1978-2667	19780310
A	19820601	US 1981-238950	19810227
		GB 1977-10401	19770311
		US 1978-883310	19780303
		US 1979-49322	19790618
	A1 A A1 B2 A A1 A2 A	A1 19780928 A 19791003 A 19790228 A1 19790906 B2 19811126 A 19780913 A1 19781006 A2 19781011 A 19830114	Al 19780928 DE 1978-2810098 A 19791003 GB 1977-10401 A 19790228 ZA 1978-1136 Al 19799906 AU 1978-33779 B2 19811126 Al 19780913 NL 1978-2644 Al 19781006 FR 1978-6971 A 19830114 CH 1978-27564 A 19830114 CH 1978-2567 A 19820601 US 1981-238950 GB 1977-10401 US 1978-883310

GΙ

AB Cyclopropanecarboxylates I (R = Cl, Br) with increased cis-trans ratio were prepd. by cyclizing R2C:CHCH:CHe2 with N2CHCO2Et in an inert

were prepd. by cyclizing RZC:CRCH:CMe2 with N2CHCO2Et in an inert rent

(e.g. ClCRI2CR2Cl) in the presence of a Rh (II) salt [e.g. Rh (II) pivalate, benzoate, chloroscetate, .alpha.-D-methylcamphorate] as catalyst at 20- 80.degree, and 30-300 min. Cis-I (R = Cl) has double the insecticidal activity of the trans isomer. Symples 53701-06-9 53701-06-9 CAPLUS (conversion of, to acid chloride) 55701-07-0 CAPLUS 63142-56-3P 63142-57-4P 68803-85-0P 68903-86-1P 68952-55-2P 68852-55-3P RL: SPN (Synthetic preparation), PREP (Preparation) (prepn. of)

IT

(prepn. of)

RN 63(2-56-3 CAPUUS

CN Cyclopropanecarboxylic acid, 3-(2,2-dichlorosthenyl)-2,2-dimethyl-,ethyl

(Continued) ANSWER 117 OF 139 CAPLUS COPYRIGHT 2002 ACS ester, (1R,3R)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

63142-57-4 CAPLUS Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-, ester, (1R,3S)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

68803-85-0 CAPLUS 68803-86-1 CAPLUS 68852-36-2 CAPLUS Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-, 1-methylheptyl ester, [1S-[1.alpha.[R*),3.alpha.]]- (9CI) (CA INDEX

68852-57-3 CAPLUS
Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-,
1-methylheptyl ester, [1R-[1.alpha.(S*),3.alpha.]]- (9CI) (CA INDEX NAME

Absolute stereochemistry.

L7 ANSWER 118 OF 139
ACCESSION NUMBER:
DOCUMENT NUMBER:
1979:22404 CAPLUS
90:22404
Dihalavinylcyclopropanecarboxylic acids and their
esters
INVENTOR(S):
Lantzsch, Reinhard
Eayer A.-G., Ger.
SOURCE:
Ger. Offen., 19 pp.
CODEN: GWXXEX
DOCUMENT TYPE:
LANGUAGE:
FAMILY ACC. NUM. COUNT:
FAMILY ACC. NUM. COUNT:
FAMILY ACC. NUM. COUNT:

DOCUMENT TYPE: LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 2710174	A1	19780914	DE 1977-2710174	19770309
US 4217300	Α	19800812	US 1978-879424	19780221
GB 1566692	A	19800508	GB 1978-8783	19780306
IL 54200	A1	19830731	IL 1978-54200	19780306
JP 53112053	A2	19781002	JP 1978-25076	19780307
AT 7801618	A	19790615	AT 1978-1618	19780307
AT 354415	В	19790110		
CH 634033	A	19830114	CH 1978-2469	19780307
DK 7801022	A	19780910	DK 1978-1022	19780308
NL 7802537	A	19780912	NL 1978-2537	19780308
FR 2383158	A1	19781006	FR 1978-6662	19780308
FR 2383158	B1	19830819		
BR 7801411	Ā	19781031	BR 1978-1411	19780308
BE 864696	A1	19780911	BE 1978-185769	19780309
US 4265819	A	19810505	US 1979-75363	19790913
PRIORITY APPLN. INFO.:		12013000	DE 1977-2710174	19770309
INTONIE MELLIN. INFO.			US 1978-879424	19780221
GI			03 1310-013424	13.00221
G1				

AB Four dihalovinylcyclopropanes I [R1, R2 = H, C1-4 alkyl, CR1R2 = C.ltoreq.7 cycloaliph. moiety: R3 = H, C1-4 alkyl, (un)substituted arylor heteroaryl methyl; R4 = R5 = F, Cl, Br], useful as insecticides (no data) or their intermediates, were prepd. Thus valerolactone II in PhMe was heated with SOC12 12 h at 75-80.degree, and the mixt. stirred 8 h with HCl-satd. EtOH at room temp. to give ClCMe2CH(CH:CCl2)CH2CO2Et which dehydrohalogenated with 50% KOH in the presence of Bu4N+Cl- in PhMe

ANSWER 117 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

68852-58-4 CAPLUS Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-, 1-methylheptyl ester, [15-[1.alpha.(R*),3.beta.]]- (9CI) (CA INDEX

Absolute stereochemistry.

68852-59-5 CAPLUS Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-,1-methylheptyl ester, [1R-[1.alpha.(S*),3.beta.]]- (9CI) (CA INDEX

Absolute stereochemistry.

ANSWER 118 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)
give 911 I (R1 = R2 = Me, R3 = Et, R4 = R5 = C1).
59609-49-3P 59898-05-4P 59982-39-5P
61949-76-6 51949-77-7P
RL: SFN (Synthetic preparation); PREP (Preparation)
(prepn. of)
59609-49-3 CAPLUS
Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-,
//

ester (9CI) (CA INDEX NAME)

59898-05-4 CAPLUS Cyclopropanecarboxylic acid, 3-{2,2-dibromoethenyl}-2,2-dimethyl-, ethyl ester (9CI) (CA INDEX NAME)

59952-39-5 CAPLUS Cyclopropanecarboxylic acid, 3-(2,2-dibromoethenyl)-2,2-dimethyl-(9CI) (CA INDEX NAME)

61949-76-6 CAPLUS Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-, (3-phenoxyphenyl)methyl ester, (1R,3R)-rel- (9CI) (CA INDEX NAME)

L7 ANSWER 118 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

61949-77-7 CAPLUS Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-, (3-phenoxyphenyl)methyl ester, (1R,38)-rel- (9C1) (CA INDEX NAME)

Relative stereochemistry.

ANSWER 119 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

L7 ANSWER 119 OF 139 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1979:22342 CAPLUS
DOCUMENT NUMBER: 90:22342 Etyl
Etyl
12,2-dimethyl-3,5,5-trichlorohewane-1-carboxylate
INVENTOR(\$): Sankyo Co., Ltd., Japan
SOURCE: CODEN: JKDKCAF
DOCUMENT TYPE: AARGUAGE: Patent
LANGUAGE: Patent
LANGUAGE: JApanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

RN CN ethyl

68620-35-9 CAPLUS Cyclopropanecarboxylic acid, 3-{2-chloro-1-propenyl}-2,2-dimethyl-, (3-phenoxyphenyl)methyl ester (9CI) (CA INDEX NAME)

$$\begin{array}{c} \text{C1} & \text{Me} \\ \text{C1} & \text{C} - \text{O} - \text{CH}_2 \\ \text{Me} - \text{C} = \text{CH} & \text{OPh} \end{array}$$

ester (9CI) (CA INDEX NAME)

68620-36-0 CAPLUS Cyclopropanecarboxylic acid, 3-(2-chloro-1-propenyl)-2,2-dimethyl-(9CI) (CA INDEX NAME)

L7 ANSWER 120 OF 139 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER:
DSCUMENT NUMBER:
1978:529076 CAPLUS
89:129076
TITLE:
Facile preparation of optically active
c-2,t-3-dimethyl-r-1-methoxycyclopropane
Andrist, A. Harry; Agnello, Richard M.; Wolfe,

AUTHOR(S): David

C. Dep. Chem., Cleveland State Univ., Cleveland, CORPORATE SOURCE: Ohio,

SOURCE:

DOCUMENT TYPE:

USA
CE: J. Org. Chem. (1978), 43(17), 3422-3
CODEN: JOCEAH; ISSN: 0022-3263
MENT TYPE: Journal
UMGE: English
Optically active -2, t-3-dimethyl-r-1-methoxycyclopropane was prepd.
through a synthetic sequence starting with (1) the cupric
trifluoromethaneaulfonate catalyzed reaction of trans-z-butene with Et
diazoacetate, followed by (2) formic acid transesterification to give

the corresponding carboxylic acid, (3) fractional recrystm. of the diastereomeric quinine salts and subsequent hydrolysis to the optically active acid, (4) conversion to the active ketone with MeLi, (5) Baeyer-Villiger oxidm. to the optically-active cyclopropyl acetate, (6)

(6) conversion to the cyclopropanol with MeLi, and (7) AlCl3-catalyzed methylation with diazomethane.

IT 66791-91-19 66791-92-2P
RL: RCT (Reactant): SFN (Synthetic preparation): PREP (Preparation) (prepn. and hydrolysis of)
RN 66791-91-1 CAPLUS
CN Cinchonan-9-ol, 6'-methoxy-, (8.alpha.,9R)-,
(1.alpha.,2.alpha.,3.beta.)-(-)
)-2,3-dimethylcyclopropanecarboxylate (salt) (9CI) (CA INDEX NAME)

CM 1

CRN 20431-71-4 CMF C6 H10 O2 CDES *

Rotation (-). Absolute stereochemistry unknown.

CM 2

CRN 130-95-0 CMF C20 H24 N2 O2

ANSWER 120 OF 139 CAPLUS COPYRIGHT 2002 ACS CDES 4:8A, 9R.CINCHONAN (Continued)

Absolute stereochemistry.

RN 66791-92-2 CAPLUS
CN Cinchonan-9-ol, 6'-methoxy-, (8.alpha.,9R)-,
(1.alpha.,2.alpha.,3.beta.)(+)-2,3-dimethylcyclopropanecarboxylate (salt) (9CI) (CA INDEX NAME)

CM 1

CRN 20431-72-5 CMF C6 H10 O2 CDES *

Rotation (+). Absolute stereochemistry unknown.

CM 2

CRN 130-95-0 CMF C20 H24 N2 O2 CDES 4:8A,9R.CINCHONAN

Absolute stereochemistry.

L7 ANSWER 120 OF 139 CAPLUS COPYRIGHT 2002 ACS (prepn. of, and reaction with methyllithium) RN 20431-71-4 CAPLUS CN Cyclopropanecarboxylic acid, 2,3-dimethyl-, (1.alpha.,2.alpha.,3.heta.)-(-) - (9CI) (CA INDEX NAME) (Continued)

Rotation (-). Absolute stereochemistry unknown.



L7 ANSWER 120 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

IT 20431-72-5P
RL: RCT (Reactant); SPN (Synthetic preparation); PREF (Preparation) (prepn. and reaction with methyllithium)
RN 20431-72-5 CAPLUS
CN Cyclopropaneoarboxylic acid, 2,3-dimethyl-,
(1.alpha.,2.alpha.,3.beta.)(+)- (9CI) (CA INDEX NAME)

Rotation (+). Absolute stereochemistry unknown.

IT 20431-63-4P
RL: SPN (Synthetic preparation); PREP (Preparation) (preps. and resoln. of)
RN 20431-63-4 CAPLUS
CN Cyclopropanecarboxylic acid, 2,3-dimethyl-,
(1.alpha.,2.alpha.,3.beta.)(9CI) (CA INDEX NAME)

Relative stereochemistry.

56711-67-2P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation) (prepn. and sapon. of)
56711-67-2 CAPLUS
20431-71-4P
RL: SPN (Synthetic preparation); PREP (Preparation)

L7 ANSWER 121 OF 139 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1578:508232 CAPLUS
DOCUMENT NUMBER: 89:108232
TITLE: A highly enantioselective synthesis of

cyclopropane

derivatives through chiral cobalt(II) complex catalyzed carbenoid reaction. General scope and factors determining the enatioselectivity Nakamura, Akira; Konishi, Akira; Tatsuno,

Yoshitaka;

Otsuka, Sei
CORPORATE SOURCE: Fac. Sci., Osaka Univ., Osaka, Japan
SOURCE: J. Am. Chem. Soc. (1978), 100(11), 3443-8
CODEN: JACSAT, ISSN: 0002-7863
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Optically active cyclopropane derivs., e.g., cis- and trans-2phenylcyclopropanecarboxylic acid, were prepd. by carbenoid-type
reactions

phenylcyclopropanecarboxyiic acid, were preporting phenylcyclopropanecarboxyiic acid, were preporting between olefins and diszoalkanes catalyzed by bis[(-)-camphorquinone-alpha-dioximato]cobalt(II). A high enantioselectivity (max. 88% optical yield) was achieved with a high chem. yield (90-95%) for the prepn. of neceentyl trans-2-phenylcyclopropanecarboxylate using a 3 mol% catalyst concn. at 0.degree. The reaction occurs selectively at a terminal double bond conjugated with a vinyl, aryl or alkoxycarbonyl group. Diazo compds. contg. electron-attracting groups (COZR, COR or CN)

can be used. The (15) enantiomer was always in large excess (60-80%

in the 2-substituted cyclopropanecarboxylates obtained with this catalyst.
699-23-OP 939-89-9P 939-90-2P
2183-90-6P 3999-56-2P 7150-12-1P
16205-67-7P 27070-05-9P 27070-06-0P
34702-96-0P 34703-09-9P 52345-59-2P
52345-60-5P 67428-04-OP 67428-05-1P
67428-05-2P 67428-07-9P 67463-06-3P
67463-07-4P 67463-08-5P

orded-or-def pride-or-sp RE: SPN (Synthetic preparation), PREP (Preparation) (prepn. of) 69-23-0 CAPLUS Cyclopropanecarboxylic acid, 2-cyano-, ethyl ester, (1R,25)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

939-89-9 CAPLUS

Cyclopropanecarboxylic acid, 2-phenyl-, (1R,2S)-rel- (9CI) (CA INDEX NAME)

L7 ANSWER 121 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

Relative stereochemistry.

939-90-2 CAPLUS Cyclopropanecarboxylic acid, 2-phenyl-, (1R,2R)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

RN 2183-: CN Cyclopropan-(9CI) (CA INDEX NAME) 2183-90-6 CAPLUS Cyclopropanecarboxylic acid, 2-ethenyl-, ethyl ester, (1R,2S)-rel-

Relative stereochemistry.

3999-56-2 CAPLUS Cyclopropanecarboxylic acid, 2-cyano-, ethyl ester, (1R,2R)-rel-(CA INDEX NAME)

Relative stereochemistry.

7150-12-1 CAPLUS Cyclopropanecarboxylic acid, 2,2-diphenyl- (6CI, 7CI, 8CI, 9CI) (CA NAME)

L7 ANSWER 121 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

34703-00-9 CAPLUS Cyclopropanecarboxylic acid, 2-phenyl-, ethyl ester, (15,2R)- (9CI) INDEX NAME)

Absolute stereochemistry. Rotation (+).

52345-59-2 CAPLUS Cyclopropanecarboxylic acid, 2-(1-methylethenyl)-, ethyl ester, (1R,2R)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

52345-60-5 CAPLUS Cyclopropanecarboxylic acid, 2-ethenyl-2-methyl-, ethyl ester, (IR, 25) -rel- (9C1) (CA INDEX NAME)

Relative stereochemistry.

67428-04-0 CAPLUS Cyclopropanecarboxylic acid, 2,2-diphenyl-, ethyl ester, (1S)- (9CI) INDEX NAME)

Absolute stereochemistry. Rotation (+).

L7 ANSWER 121 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

16205-67-7 CAPLUS 1,2-Cyclopropanedicarboxylic acid, dimethyl ester, (1S-trans)- (9CI) INDEX NAME)

Absolute stereochemistry.

RN 27070-05-9 CAPLUS CN Cyclopropanecarboxylic acid, 2-methyl-2-phenyl-, ethyl ester, (1R, 2R)-rel-(9C1) (CA INDEX NAME)

Relative stereochemistry.

RN 27070-06-0 CAPLUS CN Cyclopropanecarboxylic acid, 2-methyl-2-phenyl-, ethyl ester, (1R,2S)-rel (9CI) (CA INDEX NAME)

Relative stereochemistry.

34702-96-0 CAPLUS Cyclopropanecarboxylic acid, 2-phenyl-, ethyl ester, (15,25)- (9CI) INDEX NAME)

Absolute stereochemistry. Rotation (+).

L7 ANSWER 121 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

67428-05-1 CAPLUS 1,2-Cyclopropanedicarboxylic acid, 1-phenyl-, 2-ethyl 1-methyl ester, (1R-cis)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

67428-06-2 CAPLUS Cyclopropanecarboxylic acid, 2-(2-phenylethenyl)-, ethyl ester, [1.alpha.,2.alpha.(E)]- (9CI) (CA INDEX NAME)

Relative stereochemistry.
Double bond geometry as shown.

67428-07-3 CAPLUS Cyclopropanecarboxylic acid, 2-phenyl-, 2,2-dimethylpropyl ester, (15-cis)- (9C1) (CA INDEX NAME)

Absolute stereochemistry.

67463-06-3 CAPLUS 1,2-Cyclopropanedicarboxylic acid, 1-phenyl-, 2-ethyl 1-methyl ester, (15-trans) - (SCI) (CA INDEX NAME)

Absolute stereochemistry.

ANSWER 121 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

67463-07-4 CAPLUS Cyclopropanecarboxylic acid, 2-(2-phenylethenyl)-, ethyl ester, [1.alpha.,2.beta.(E)]- (9CI) (CA INDEX NAME)

Relative stereochemistry.
Double bond geometry as shown.

67463-08-5 CAPLUS Cyclopropanecarboxylic acid, 2-phenyl-, 2,2-dimethylpropyl ester, (IS-trans)- (SCI) (CA INDEX NAME)

Absolute stereochemistry.

ANSWER 122 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)
I (R = H, R1 = Me, R2 = C1).
55701-05-8P 61898-95-1P
RL: SFN (Synthetic preparation), PREF (Preparation)
(prepn. of)
55701-05-8 CAPLUS
Cyclopropanecarboxylic acid, 3-{2,2-dichloroethenyl}-2,2-dimethyl-

RN CN (9CI) (CA INDEX NAME)

RN 61898-95-1 CAPLUS CN cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-, methyl (ACI) (ACI) (ACI) (ACI) ester (9CI) (CA INDEX NAME)

ANSWER 122 OF 139 CAPLUS COPYRIGHT 2002 ACS SSION NUMBER: 1978:152110 CAPLUS MENT NUMBER: 88:152110

ACCESSION NUMBER: DOCUMENT NUMBER: TITLE: INVENTOR(S): Substituted cyclopropanecarboxylic acid esters Mori, Fumio; Ommura, Yusho; Nishida, Takuji; Itoi,

PATENT ASSIGNEE(S): SOURCE: Kuraray Co., Ltd., Japan

Japan. Kokai, 12 pp. CODEN: JKXXAF Patent

DOCUMENT TYPE: LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION: Japanese 3

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 52133953	A2	19771109	JP 1976-50595	19760430
GB 1561502	A	19800220	GB 1976-30587	19760722
US 4458090	A	19840703	US 1981-311896	19811015
US 4468521	A	19840828	US 1982-350566	19820222
PRIORITY APPLN. INFO.	:		JP 1975-89507	19750722
			JP 1975-158047	19751229
			JP 1976-50595	19760430
			US 1976-705176	19760714
			ITC 1077-040270	10771007

AB R102CCHRCMe2CHR2CH2CR23, R102CCHRCMe2CHR2CR1:CR22 (I), R02CCHRCMe2CH:CHCR23 (R = H, alkyl) Rl = alc. residue; R2 = halo), or their mixts. were treated with alkali hydroxide and then with acids to give the cyclopropanecarboxylic acid esters II (R3 = alc. residue) and 3,3-dimethyl-4-(2,2-dihalovinyl)-4-butanolide (III), which were sept. by

heating with an acid catalyst. III was treated with H halide and alc. to regenerate the starting material. II were useful for

manufg.

pyrethrin pesticides (no data). Thus, 26 parts I (R = H; R1 = Me; R2

Cl), was treated with NaOH-MeOH to give a mixt. of II (R = H, R2 = C1, R3

- Me) and III, which was refluxed in MeOH-p-MeC6H4SO3H for 20 h to give a mixt. contg. 69% II (R - H, R2 - Cl, R3 - He) and 26% III, which was evapd. in vacuo to give 13.9 parts I (R - H, R2 - Cl, R3 - He) and 4.7 parts III. III was treated with 50% HCl-MeOH overnight to give 5.6 parts

L7 ANSWER 123 OF 139 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1978:89162 CAPLUS
DOCUMENT NUMBER: 88:89162
TITLE: Chemistry of gem-dihalocyclopropanes. XII.
Preparation of gem-dibromocyclopropyl ketones and alkyl gem-dibromocyclopropanecarboxylates under

AUTHOR(S): CORPORATE SOURCE: SOURCE:

transfer conditions
Sydnes, Leiv K.
Dep. Chem., Vhiv. Oslo, Oslo, Norway
Acta Chem. Scand., Ser. B (1977), 31(9), 823-5
CODEN: ACROCV
JOURNAL
English

DOCUMENT TYPE: LANGUAGE: GI

Treatment of R1CH:CR2CO2R3 (R1 - H, Me, Ph; R2 - Me, Ph; R3 - Me, Et,

with 30-100% excess of HCX3 (X = C1, Br), and 5-fold excess of base

oh in the presence of Et3N+CH2PhCl- gave 6-95% cyclopropanes I.

Similarly, MeCOCMe: CH2 gave 794 2-acetyl-1,1-dibromo-2-methylcyclopropane.

of mesityl oxide, phorone, and Me cinnamate with CHBr3 gave no identifiable products. When carvone and CHX3 were exposed to the phase

transfer conditions a regioselective reaction took place and 7,7-dihalo-4-isopropenyl-1-methylbicyclo[4.1.0]heptan-2-one was the only

isolatable product; no compd. arising from addn. to the exocyclic double

le bond was detected. 1447-13-8P 1447-14-9P 5365-21-9P 39666-99-6P 39647-01-3P 39647-03-5P 58683-49-1P 65655-78-9P 65655-79-0P 65655-80-3P

RL: SPN (Synthetic preparation); PREP (Preparation)

(prepn. of)
1447-13-8 (prepn. of)
Cyclopropanecarboxylic acid, 2,2-dichloro-1-methyl-, methyl ester RN 1447-13--CN Cyclopropanecarbox,--(7CI, 8CI, 9CI) (CA INDEX NAME)

RN 1447-14-9 CAPLUS CN Cyclopropanecarboxylic acid, 2,2-dichloro-1-methyl- (6CI, 7CI, 8CI, 9CI) (CA INDEX NAME)

5365-21-9 CAPLUS Cyclopropanecarboxylic acid, 2,2-dibromo-1-methyl- (7CI, 8CI, 9CI) INDEX NAME)

RN 39646-99-6 CAPLUS
CN Cyclopropanecarboxylic acid, 2,2-dichloro-1-phenyl-, ethyl ester
(9CI) (CA INDEX NAME)

RN 39647-01-3 CAPLUS CN Cyclopropanecarboxylic acid, 2,2-dibromo-1-methyl-, methyl ester (9CI) (CA INDEX NAME)

L7 ANSWER 123 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

65655-80-3 CAPLUS Cyclopropanecarboxylic acid, 2,2-dibromo-1-methyl-3-phenyl-, ethyl ester, trans- (9CI) (CA INDEX NAME)

Relative stereochemistry.

L7 ANSWER 123 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

RN 39647-03-5 CAPLUS
CN Cyclopropanecarboxylic acid, 2,2-dibromo-1-methyl-, butyl ester (9CI)
(CA INDEX NAME)

RN 58683-49-1 CAPLUS
CN Cyclopropanecarboxylic acid, 2,2-dibromo-1-methyl-, ethyl ester (9CI)
(CA INDEX NAME)

65655-78-9 CAPLUS Cyclopropanecarboxylic acid, 2,2-dibromo-1-phenyl-, ethyl ester (9CI) INDEX NAME)

65655-79-0 CAPLUS Cyclopropancarboxylic acid, 2,2-dibromo-1,3-dimethyl-, ethyl ester, trans- (SCI) (CA INDEX NAME)

Relative stereochemistry.

L7 ANSWER 124 OF 139 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1578:37973 CAPLUS
DOCUMENT NUMBER: 88:37973
Asymmetric synthesis of chrysanthemic acid. An application of copper carbenoid reaction Aratani, T., Yoneyoshi, Y., Nagase, T.
CORPORATE SOURCE: Cent. Res. Lab., Sumitomo Chem. Co., Ltd., Osaka, Japan
SOURCE: Tetrahedron Lett. (1977), (30), 2599-602
CODEN: TELEAY
DOCUMENT TYPE: Journal
LANGUAGE: English

DOCUMENT TYPE: LANGUAGE: GI

AB Alkyl chrysanthemates were prepd. by reaction of alkyl diazoacetates with

(Me2C:CH)2 (I) in the presence of the copper complexes II [R = Me, R1 $\,$

5,2-Me3C[MeCH2) 70]C6H3, 2.5-Bu0(Me3C)C6H3; R = FhCH2, R1 = 5,2-MeC[Me(CH2)60]C6H3]. E.g., 1-menthyl diazoacetate with I and (R)-II

II [R = Me, R1 = 5, 2-Me3C[Me(CH2)70]C6H3] at 20.degree. for 7 h gave 72% 1-menthyl chrysanthemate with 94% enantiomeric excess (ee) of the

s isomer. A catalyst of R-configuration gives d-chrysanthemic acid in both cis and trans isomers. The bulkier the alkyl group of

the

diazo compd. the higher the trans/cis ratio of the product and the ee of

IT

the trans isomer.
4638-92-0P
RL: SPN (Synthetic preparation); PREP (Preparation)
(asym. prepn. of)
4638-92-0 CAPUS

4638-92-U CAPUS Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2-methyl-1-propenyl)-, (1R,3R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

26771-11-9F 40999-13-1F 56194-30-0F 63234-59-1F 63323-85-3F 63323-87-5F 64312-83-0F 65395-64-4F 65395-85-55-F 65395-66-6F 65395-67-7F 65437-24-3F 65437-28-7F 65437-29-F 65437-29-7F 65437-29-F 65437-30-1F 65437-22-3F 65450-90-0F RL: SFN (Synthetic preparation), PREF (Preparation) (prepn. of) 26771-11-9 CAPLUS (Value of Caplus ΙT

Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2-methyl-1-propenyl)-, (1R,3S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

40999-13-1 CAPLUS 40999-13-1 CAPLUS Cyclopropanecarboxylic acid, 2,2-dimethyl-3-{2-methyl-1-propenyl}-, (1R,2S,5R)-5-methyl-2-(1-methylethyl)cyclohexyl ester, (1R,3R)-(9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

56194-30-0 CAPLUS
Cyclopropanecarboxlic acid, 2,2-dimethyl-3-(2-methyl-1-propenyl)-,
1,1-dimethylethyl ester, (IR-trans)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

ANSWER 124 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

64312-83-0 CAPLUS Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2-methyl-1-propenyl)-, 1,1-dimethylethyl ester, (1R-cis)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

65395-64-4 CAPLUS Cyclopropanecarboxylic acid, 2,2-dimethyl-3-{2-methyl-1-propenyl}-, tricyclo[3.3.1.13,7]dec-1-yl ester, (1R-trans)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

65395-65-5 CAPLUS Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2-methyl-1-propenyl)-, 1,2-dimethyl-1-(1-methylethyl)propyl ester, (1R-trans)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

ANSWER 124 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

63254-59-1 CAPLUS
Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2-methyl-1-propenyl)-,
1-methylheptyl ester, [1R-[1.alpha.(S*),3.beta.]]- [9CI) (CA INDEX

Absolute stereochemistry.

63323-85-3 CAPLUS
Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2-methyl-1-propenyl)-,
(IR,25,53)-5-methyl-2-(1-methylethyl)cyclohexyl ester, (IR,35)-(9CI)

INDEX NAME)

Absolute stereochemistry.

63323-87-5 CAPLUS
Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2-methyl-1-propenyl)-,
1-methylheptyl ester, [IR-[1.alpha.[5*),3.alpha.]]- [9CI] (CA INDEX NAME)

Absolute stereochemistry.

ANSWER 124 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

65395-66-6 CAPLUS Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2-methyl-1-propenyl)-, 1,1,2-trimethylpropyl ester, (1R-trans)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

65395-67-7 CAPLUS Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2-methyl-1-propenyl)-, 1,1-dimethyl-2-phenylethyl ester, (1R-trans)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

65437-24-3 CAPLUS Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2-methyl-1-propenyl)-, 5-methyl-2-(1-methylethyl)cyclohexyl ester, [1S-[1.alpha.(1S*,3S*),2.beta.,5.alpha.]]- (9C1) (CA INDEX NAME)

Absolute stereochemistry.

L7 ANSWER 124 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

65437-25-4 CAPLUS Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2-methyl-1-propenyl)-, 5-methyl-2-(1-methylethyl)cyclohexyl ester, [1S-[1.alpha.(1S*,3S*),2.alpha.,5.beta.]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

65437-26-5 CAPLUS Cyclopropanecatoxylic acid, 2,2-dimethyl-3-(2-methyl-1-propenyl)-, cyclohexyl ester, (IR-trans)- (SCI) (CA INDEX NAME)

Absolute stereochemistry.

65437-27-6 CAPLUS Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2-methyl-1-propenyl)-,5-methyl-2-(1-methylethyl)cyclohexyl ester, [1s-[1.alpha.(1S*,3R*),2.beta.,5.alpha.]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

65437-28-7 CAPLUS Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2-methyl-1-propenyl)-, 5-methyl-2-(1-methylethyl)cyclohexyl ester, [15-

ANSWER 124 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

65437-32-3 CAPLUS Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2-methyl-1-propenyl)-, 1,1-dimethyl-2-phenylethyl ester, (1R-cis)- (9CI) (CA INDEX NAME)

65450-90-0 CAPLUS Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2-methyl-1-propenyl)-, cyclohexyl ester, (1R-cis)- (9CI) (CA INDEX NAME)

ANSWER 124 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued) [1.alpha.(1S*,3R*),2.alpha.,5.beta.]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

65437-29-8 CAPLUS

Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2-methyl-1-propenyl)-, tricyclo[3.3.1.13,7]dec-1-yl ester, (1R-cis)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

65437-30-1 CAPLUS
Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2-methyl-1-propenyl)-,
1,2-dimethyl-1-(1-methylethyl)propyl ester, (1R-cis)- (9CI) (CA INDEX
NAME)

Absolute stereochemistry.

65437-31-2 CAPLUS Cyclopropanecathoxylic acid, 2,2-dimethyl-3-(2-methyl-1-propenyl)-, 1,1,2-trimethylpropyl ester, (IR-cis)- (9CI) (CA INDEX NAME)

ANSWER 125 OF 139

ANSWER 125 OF 139

ISSION NUMBER: 1977:534650

APPLUS COPYRIGHT 2002 ACS

1977:534650

APPLUS CAPLUS COPYRIGHT 2002 ACS

1977:534650

APPLUS COPYRI ANSWER 125 OF
ACCESSION NUMBER:
DOCUMENT NUMBER:
TITLE:
INVENTOR(S):
PATENT ASSIGNEE(S):
SOURCE:

DOCUMENT TYPE:

LANGUAGE: FAMILY ACC. NUM. COUNT:

Leaven	noo.	1.011.	CO01
PATENT	INFO	ITAMA	ON:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 2651341	A1	19770526	DE 1976-2651341	19761110
GB 1559799	A	19800130	GB 1975-46700	19751112
NL 7612461	Α	19770516	NL 1976-12461	19761110
JP 52062238	A2	19770523	JP 1976-134268	19761110
JP 61008053	B4	19860311		
FR 2331545	A1	19770610	FR 1976-33901	19761110
FR 2331545	В1	19801107		
BR 7607517	A	19770920	BR 1976-7517	19761110
IL 50880	A1	19801026	IL 1976-50880	19761110
CH 621109	A	19810115	CH 1976-14181	19761110
US 4118413	A	19781003	US 1977-824459	19770815
US 4118413	B1	19840124	US 1983-90000233	19830726
PRIORITY APPLN. INFO.	:		GB 1975-46700	19751112
			US 1976-737312	19761101
			IIC 1977-824459	19770915

US 1977-824459 19770815

AB Pesticidal RCO2CHR1C6H4OPh (R = substituted cyclopropy),
4-clc6H4CHCHMe2;
R1 - H, CN) were prepd. by the reaction of a stirred neutralized aq. R1 = H, CN) were prept. By the resolve.

of RCO2H with PhOCGH4CHRIBT in the presence of PhMe and a phase-transfer agent, e.g., a quaternary ammonium salt. Thus, aq.

4-ClCGH4CH(CO2H) CHMe2

was neutralized with KZCO3, followed by the addn. of Bu4NBr (I), 3-PhOCGH4CHBrCN, and PhMe, and the mixt. was stirred at 35.degree. to give

98% 4-ClC6H4CH(CHMe2)CO2CH(CN)C6H4OFh-3 of 98% purity, compared to 40% yield without I. 15641-58-4 53179-78-5 55701-05-8 63538-10-3 63597-73-9

e3538-10-1 e3587-73-9
RE: RCT (Reactant)
(esterification of, by phenoxybenzyl bromides)
15641-58-4 CAPLUS
Cyclopropanecarboxylic acid, 2,2,3,3-tetramethyl- (6CI, 8CI, 9CI) (CA
INDEX NAME)

L7 ANSWER 125 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

53179-78-5 CAPLUS CAPUS Cyclopropanecarboxylic acid, 3-(2,2-dibromoethenyl)-2,2-dimethyl-, (1R,3R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

55701-05-8 CAPLUS Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-(9CI) (CA INDEX NAME)

63538-10-3 CAPLUS Cyclopropanecarboxylic acid, 3-(2,2-dibromoethenyl)-2,2-dimethyl-, (1R,3S)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

Cyclopropa nearboxylic acid, 3-(2,2-dibromoethenyl)-2,2-dimethyl-,(1R,3R)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

ANSWER 125 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

ANSWER 125 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

IT

39515-41-8P 52315-07-8P 52645-53-1P
52820-00-5P
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)
39515-41-8 CAPLUS
Cyclopropanecarboxylic acid, 2,2,3,3-tetramethyl-, cyano(3-phenoxyphenyl)methyl ester (9CI) (CA INDEX NAME)

52315-07-8 CAPLUS Cyclopropancarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-, cyano(3-phenoxyphenyl)methyl ester (9CI) (CA INDEX NAME)

52645-53-1 CAPLUS Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-, (3-phenoxyphenyl)methyl ester (9CI) (CA INDEX NAME)

52820-00-5 CAPLUS Cyclopropanecarboylic acid, 3-(2,2-dibromoethenyl)-2,2-dimethyl-, cyano(3-phenoxyphenyl)methyl ester (9CI) (CA INDEX NAME)

L7 ANSWER 126 OF 139
ACCESSION NUMBER:
DOCUMENT NUMBER:
TITLE:
INVENTOR(5):
Fumio; CAPLUS COPYRIGHT 2002 ACS 1977:468506 CAPLUS 87:68506 Optically active alkylchrysanthemate Aratani, Tadatoshi; Yoneyoshi, Yukio; Fujita,

Nagase, Tsuneyuki Sumitomo Chemical Co., Ltd., Japan Ger. Offen., 28 pp. CODEN: GWXXEX Patent German 3 PATENT ASSIGNEE(S): SOURCE:

DOCUMENT TYPE: LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE DE 2634663 Al 19770317 DE 1976-2634663 19760802

DE 2634663 B2 19790531

DE 2634663 C3 19800117

JP 52017448 A2 19770209 JP 1975-94349 19750801

JP 59010336 B4 19840308

PRIORITY APPLN. INDO. se printed CA Issue.

Mo Optically active alkyl chrysanthemates were prepd. by treating the appropriate alkyl diazoacetates with Me2C:CHCH:CMe2 in the presence of a

Cu complex with chiral ligands. For example, a soln. of 0.03 g (R)-I

= Me, R2 = O(CH2)7Me] in 17.6 g Me2C:CHCH:CMe2 was treated with a mixt. of

mixt. of Me2C:CHCH:CHe2 and 1-menthyl diazoacetate to give 4.7 g of a stereoisomeric mixt. of 1-menthyl chrysanthemates, sept. by gas chromatog.

I [R1, R2, abs. configuration of ligand given: Me, O(CH2) 7Me, S; Me, OCHMe2, S; Me, OBU, R; CH2Ph, O(CH2) 6Me, R; CH2Ph, O(CH2) 6Me, S] also reacted with the diazoacetates of d1-menthol, d-neomenthol, 1-adamantanol, cyclohexanol, .alpha..alpha.-dimethyl-.beta.-(1-menthyloxy) ethanol, Me3COH, Me2CHGOME2CH, (Me2CH) 2CMeOH, or PhCMe2OH to give the optically active alkyl chrysanthemates.

II 10453-89-1P
RL: PREP (Preparation)

10453-99-1P
RL: PREP (Preparation)
(by hydrolysis of alkyl chrysanthemates)
10453-89-1 CAPLUS
Cyclopropasecarboxylic acid, 2,2-dimethyl-3-(2-methyl-1-propenyl)-CN (9CI)

(CA INDEX NAME)

L7 ANSWER 126 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

IT 40999-13-19 40999-14-2P 63323-65-3P

63323-66-4P

R1: RCT (Reactant), SFN (Synthetic preparation), PREP (Preparation) (prepn. and hydrolysis of)

RN 40999-13-1 CAPLUS

CN Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2-methyl-1-propenyl)-, (1R, 2S, SR)-5-methyl-2-(1-methylethyl) cyclohexyl ester, (1R, 3R)
[9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

40999-14-2 CAPLUS Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2-methyl-1-propenyl)-, (IR,2S,SR)-5-methyl-2-(1-methylethyl)cyclohexyl ester, (IS,3S)-) (CA

(9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

63323-85-3 CAPLUS

Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2-methyl-1-propenyl)-, (1R,2S,5R)-5-methyl-2-(1-methylethyl)cyclohexyl ester, (1R,3S)-(9CI)

) (CA INDEX NAME)

Absolute stereochemistry.

ANSWER 126 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

63323-88-6 CAPLUS

Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2-methyl-1-propenyl)-, 1-methylheptyl ester, [1S-[1.alpha.(R*),3.beta.]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

63323-89-7 CAPLUS

Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2-methyl-1-propenyl)-,
1-methylheptyl ester, [1S-[1.alpha.(R*),3.alpha.]]- (9CI) (CA INDEX

Absolute stereochemistry.

L7 ANSWER 126 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

63323-86-4 CAPLUS

Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2-methyl-1-propenyl)-, (1R,2S,5R)-5-methyl-2-(1-methylethyl)cyclohexyl ester, (1S,3R)- (9CI) (CA

INDEX NAME)

Absolute stereochemistry.

IT 63254-59-1P 63323-87-5P 63323-88-6P 63323-89-7P

RL: SPN (Synthetic preparation); PREP (Preparation)

(prepn. of)
63254-59-1 CAPLUS
Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2-methyl-1-propenyl)-,
1-methylheptyl ester, [1R-[1.alpha.(S*),3.beta.]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

63323-87-5 CAPLUS

Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2-methyl-1-propenyl)-, 1-methylheptyl ester, [1R-[1.alpha.(5*),3.alpha.]}- (9CI) (CA INDEX

Absolute stereochemistry.

L7 ANSWER 127 OF 139 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1977:88454 CAPLUS
DOCUMENT NUMBER: 86:88454
TITLE: Esterification of cub. BE:88454 Esterification of carboxylic acids in presence of intercalary compounds of acid and graphite

bisulfate INVENTOR(S): Setton, Kagan, Henri; Bertin, Jean; Luche, Jean L.;

Ralph Agence Nationale de Valorisation de la Recherche, PATENT ASSIGNEE(S):

Fr. SOURCE: Fr. Demande, 9 pp. CODEN: FRXXBL

DOCUMENT TYPE:

Patent French

LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
FR 2288079	A1	19760514	FR 1974-34673	19741015
FR 2288079	B1	19770318		

GI

AB Esterification of carboxylic acids by alcs. is facilitated by treating equimolar amts. of scid and alc. in cyclohexane at room temp. with 30-60%

(on acid) of graphite bisulfate, C24+HSO4-.2H2SO4, prepd. by

(on acid) of graphite bibliance, collections of 98% H2SO4 on a graphite electrode. Thus, I was prepd. in 98% yield with retention of configuration.

IT 1759-53-1
RL: RCT (Reactant)
(esterification of, with alcs., graphite bisulfate catalyst for)

for)
1759-53-1 CAPLUS
Cyclopropanecarboxylic acid (6CI, 7CI, 8CI, 9CI) (CA INDEX NAME)

CO2H

IT 61889-13-2P

ANSWER 127 OF 139 CAPLUS COPYRIGHT 2002 ACS (CRL: SPN (Synthetic preparation), PREP (Preparation) L7 (Continued) (prepn. of) 61889-13-2 CAPLUS

Cyclopropanecarboxylic acid, 2-methylbutyl ester (9CI) (CA INDEX NAME)

C-0-CH2-CH-Et

L7 ANSWER 128 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued) Relative stereochemistry.

56907-92-7P ΙT

56907-92-7P
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. and conversion to dihydrochrysanthemolactone)
56907-92-7 CAPLUS
56941-78-7P

Soyal-70-7P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)
(prepn. and dehydration of)
56941-78-7 CAPLUS

NN 50941-78-7 CAPLUS
CC Cyclopropanecarboxylic acid,
3-(2-hydroxy-2-methylpropyl)-2,2-dimethyl-,
trans- (9CI) (CA INDEX NAME)

Relative stereochemistry.

IТ

Section (Reactant); SPN (Synthetic preparation); PREP (Preparation) (prepn. and hydrolysis of) 5685-08-6 CAPLUS 2935-23-1P

2935-23-1P
RL: SPN (Synthetic preparation); PREP (Preparation) (prepn. and purifn. of)
2935-23-1 CAPLUS

Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2-methyl-1-propenyl)-, (1R,3S)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

ΙT

56859-09-7P
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. and removal from mixt. with cis-chrysanthemic acid)
56859-09-7 CAPLUS

L7 ANSWER 128 OF 139
ACCESSION NUMBER:
DOCUMENT NUMBER:
TITLE:
INVENTOR(5): CAPLUS COPYRIGHT 2002 ACS 1975:514679 CAPLUS 83:114679

cis-Chrysanthemumic acid Honda, Tsohiko, Itaya, Nobushige, Horiuchi,

Fukashi;

Higo, Akio Sumitomo Chemical Co., Ltd., Japan Ger. Offen., 22 pp. CODEN: GWXXEX Patent PATENT ASSIGNEE(S):

SOURCE:

DOCUMENT TYPE:

LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 2440745	A1	19750327	DE 1974-2440745	19740826
DE 2440745	B2	19760526		
DE 2440745	C3	19770203		
JP 50047952	A2	19750428	JP 1973-96522	19730827
JP 50082035	A2	19750703	JP 1973-131988	19731122
JP 52031333	B4	19770813		
JP 50084549	A2	19750708	JP 1973-135976	19731130
NL 7411205	A	19750303	NL 1974-11205	19740822
GB 1432518	A	19760422	GB 1974-37130	19740823
US 3989654	A	19761102	US 1974-500018	19740823
DK 7404531	A	19750428	DK 1974-4531	19740826
DK 134546	В	19761129		
FR 2257565	A1	19750808	FR 1974-29108	19740826
FR 2257565	B1	19790105		
CH 603532	A	19780831	CH 1974-11666	19740827
PRIORITY APPLN. INFO			JP 1973-96522	19730827
	• •		JP 1973-131988	19731122
			TD 1072 125076	10721120

JP 1973-131988 19731122
JP 1973-135976 19731120
For diagram(s), see printed CA Issue.

Me trans-.delta.-hydroxydihydrochrysanthemate (I, R = OH), obtained by hydrolysis of I (R = Cl), was treated with an alkali metal alkoxide to give a mixt. of cis-chrysanthemic acid (I, R = MeZcCH) (III) and cis-isochrysanthenic acid (II, R = CH2:CMeCH2) (IV); the latter lated

cyclized in the presence of a catalyst to give the lactone V which was removed from the mixt. to give a higher conch. of III. Thus, 5 g a

mixt. of III and IV in 50 ml H2O, obtained by treating I (R = OH) with NaOH-NaOWe, was heated with 0.25 g maleic acid for 5 hr, the reaction mixt. acidified and extd. with Et2O to give a 9:1 mixt. of III and IV. From the water layer 1.8 g V was isolated. The phenoxybenzyl ester

II
was useful as a mosquito insecticide.
705-16-8
RL: RCT (Reactant)
(hydrochlorination of)
705-16-8 CAPLUS
Cyclopropanecarboxylic acid, 2,2-dimethyl-3-{2-methyl-1-propenyl}-,
(1R,3R)-rel- (9CI) (CA INDEX NAME)

L7 ANSWER 129 OF 139 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1375:479389 CAPLUS
DOCUMENT NUMBER: 83:79389
Asymmetric synthesis of chrysanthemic acid.
Application of copper carbenoid reaction
Aratani, T.; Yoneyoshi, Y.; Nagase, T.
CORPORATE SOURCE: Cent. Res. Lab., Sumitomo Chem. Co., Ltd., Osaka,
Japan
SOURCE: Tetrahedron Lett. (1975), (21), 1707-10
CODEN: TELEAY
OCURNI TYPE: Journal
LANGUAGE: Jepinted CA Issue.
AN NZHCOZET in (MeZC:CH) 2 decompd. in the presence of a Cu catalyst
I to give an isomeric mixt. of the title acid II (R = H). Thus (S)-I
(R =

R1 = Me, R2 = H), prepd. by reaction of (S)-MeCH(NH2)CO2Et with the Grignard reagent derived from 2-MeCC6H4Br and reaction of the resulting alc. with 2-HOC6H4CHO and Cu(OAc)2, reacted with N2CHCO2Et in

(Me2C:CH) 2

(Me2C:CH)2
 to give 64% of a cis-trans mixt. of the ester II (R = Et).
Hydrolysis of
 this ester gave the title acid II (R = H). When the catalyst I
 had an (S) configuration, the acid II (R = H) was predominantly
levorotatory; when the configuration was (R), dextrorotatory acid II

H) was formed predominantly. The optical activity of the acid II (R increased with the bulkiness of the substituents R1 and R2 of I.

15543-65-4P 22467-82-9P
RL: RCT (Reactant), SPN (Synthetic preparation), PREP (Preparation)
(prepn. and hydrolysis of)

1543-65-4 CAPLUS

22467-82-9 CAPLUS

2259-14-89 4638-92-0P 26771-06-2P

26771-11-9P
RL: SPN (Synthetic accessible of the substitution) = H)

RL: SPN (Synthetic preparation); PREP (Preparation) (prepn. of)
2259-14-5 CAPLUS

223-14-5 CAPIUS Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2-methyl-1-propenyl)-, (15,35)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

4638-92-0 CAPLUS

Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2-methyl-1-propenyl)-, (1R,3R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

ANSWER 129 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2-methyl-1-propenyl)-, (15,3R)- (9CI) (CA INDEX NAME) 26771-06-2 CAPLUS

Absolute stereochemistry.

26771-11-9 CAPLUS Cyclopropanearboxylic acid, 2,2-dimethyl-3-(2-methyl-1-propenyl)-, (1R,3S)- (9CI) (CA INDEX NAME)

ANSWER 130 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued) (AcO) 2Cu.H2O. Three III were prepd. by reaction of bis(salicylaldehydato) copper with H2MCHR4C(OH) (CGH4CMe-x) 2. 16642-27-69 41641-25-2P 41641-26-3P 41642-27-4P
RL: RCT (Reactant); SFN (Synthetic preparation); PREP (Preparation) (prepn. and hydrolysis of) 16642-27-6 CAPLUS (Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2-methyl-1-propenyl)-,1

ester, (15,3R) - (9CI) (CA INDEX NAME)

Absolute stereochemistry.

41641-25-2 CAPLUS
Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2-methyl-1-propenyl)-, ester, (1R,3R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

41641-26-3 CAPLUS Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2-methyl-1-propenyl)-, ethyl ester, (1R,3S) - (9CI) (CA INDEX NAME)

Absolute stereochemistry.

41641-27-4 CAPLUS
Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2-methyl-1-propenyl)-,

ACCESSION NUMBER: DOCUMENT NUMBER: TITLE:

ANSWER 130 OF 139

CAPLUS COPYRIGHT 2002 ACS
1975:3854 CAPLUS
82:3854
E: Chrysanthemumic acid and copper catalysts
for its preparation
ATACAIN, ATACAIN, ATACAIN, AND ATACAIN, TAGAICSH, TWING
NT ASSIGNEE(S):
CC: GE. Offen., 36 pp.
CODEN: GWXXEX
MENT TYPE: QUAGE:
ULAGE:
CF. GE. GE. GY. GE.
ULAGE:
CF. GE. GE.
CF. GE. GY. GE.
CODEN: GWXXEX
PATENT ATACAIN, COUNT: 1

LY ACC. NUM. COUNT: 1 INVENTOR (S):

PATENT ASSIGNEE(S): SOURCE:

DOCUMENT TYPE: LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 2407094	Al	19740905	DE 1974-2407094	19740214
DE 2407094	C2	19850110		
JP 49102649	A2	19740927	JP 1973-18642	19730214
JP 50018439	A2	19750226	JP 1973-69998	19730620
JP 50024254	A2	19750315	JP 1973-69997	19730620
JP 53043955	B4	19781124		
IL 44167	A1	19790930	IL 1974-44167	19740207
NL 7401785	A	19740816	NL 1974-1785	19740208
CH 594593	A	19780113	CH 1974-1896	19740212
BE 810959	A1	19740529	BE 1974-140845	19740213
FR 2217312	A1	19740906	FR 1974-4901	19740213
FR 2217312	B1	19800523		
IT 1004954	A	19760720	IT 1974-67422	19740213
DK 136642	В	19771107	DK 1974-756	19740213
SU 689615	D	19790930	SU 1974-1999312	19740213
GB 1455189	A	19761110	GB 1974-6828	19740214
CA 1016553	A1	19770830	CA 1974-192555	19740214
US 4029690	A	19770614	US 1975-549034	19750211
DK 7505401	A	19751128	DK 1975-5401	19751128
DK 152728	В	19880502		
DK 152728	C	19880926		
US 4029683	A	19770614	US 1975-645541	19751229
PRIORITY APPLN. INFO.	. :		JP 1973-18642	19730214
			JP 1973-69997	19730620
			JP 1973-69998	19730620
			DK 1974-756	19740213
			US 1974-442413	19740214
			US 1975-549034	19750211

US 1974-442413 19740214
US 1975-549034 19750211
GI For diagram(s), see printed CA Issue.
AB Mixts. of Et cis- and trans-chrysanthemumate (I), from which chrysanthemumic acid was obtained by hydrolysis, were prepd. by reaction of (Me2C:CH)2 with N2CHC02Et in the presence of the Cu complexes II

(Rn =

H, 3,5-Br2, 3-EtO, or 5,6-benzo; R1 = Me, CHMe2, CH2CHMe2, CH2Ph, CH2C6H4OCHMe2-4, or cyclohexylmethyl; R2 = C1-8 alkyl, Ph, or CH2Ph;

H, Me, CMe3, or OBu) and III (x = 2 or 3, R4 = CH2Ph or CH2CHMe2). II were prepd. by reaction of salicylaldehydes with H2NCHR1C(OH) [C6H3(OR2)R3-2,5]2 to give the Schiff bases, which reacted with

ANSWER 130 OF 139 CAPLUS COPYRIGHT 2002 ACS ester, (18,35)- (9CI) (CA INDEX NAME)

2259-14-5P 4638-92-0P 26771-06-2P 26771-11-9P

2677;-11-9P
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)
2259-14-5 CAPLUS
Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2-methyl-1-propenyl)-,
(15,38)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

4638-92-0 CAPLUS Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2-methyl-1-propenyl)-, (1R,3R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

26771-06-2 CAPLUS Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2-methyl-1-propenyl)-, (15,3R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

ANSWER 130 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued) 26771-11-9 CAPLUS CCYclopropanecarboxylic acid, 2,2-dimethyl-3-(2-methyl-1-propenyl)-, (1R,3S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

ANSWER 131 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued) RL: SPN (Synthetic preparation); PREP (Preparation) (preph. of) 827-90-7 CAPLUS 1802-02-4 CAPLUS Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2-methyl-1-propenyl)-, ethyl ester, (1R,3R)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

ANSWER 131 OF 139 CAPLUS COPYRIGHT 2002 ACS SSION NUMBER: 1974:70421 CAPLUS MENT NUMBER: 80:70421 ACCESSION NUMBER: DOCUMENT NUMBER: TITLE: 80: /0421 2,2-Dimethyl-3-(2'-methyl)-1'-propenyl-1,3-trans-cyclopropane-1-carboxylic acid and its alkyl esters INVENTOR(S): Nagase, Tsuneyuki; Suzukamo, Gohfu; Yoneyoshi,

Yukio

Yoshioka, Hirosuke Sumitomo Chemical Co., Ltd., Japan Ger. Offen., 37 pp. CODEN: GWXXEX Patena 2 PATENT ASSIGNEE (S): SOURCE:

DOCUMENT TYPE: LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

PATENT NO.	KIND	DATE		APPLICATION NO.	DATE
					19730515
DE 2324473	A1	19731129		DE 1973-2324473	19730515
DE 2324473	B2	19770811			
JP 49011855	A2	19740201		JP 1972-48852	19720516
JP 49011856	A2	19740201		JP 1972-49695	19720518
JP 49013149	A2	19740205		JP 1972-56258	19720605
JP 55016568	B4	19800502			
JP 49031883	A2	19740322		JP 1972-77905	19720802
JP 49124049	A2	19741127		JP 1973-25472	19730301
JP 56012626	B4	19810323			
US 3906026	A	19750916		US 1973-358988	19730510
CA 999011	A1	19761026		CA 1973-171066	19730511
GB 1426000	A	19760225		GB 1973-22869	19730514
BE 799541	A1	19731116		BE 1973-131115	19730515
FR 2184867	A1	19731228		FR 1973-17553	19730515
IT 986561	A	19750130		IT 1973-68398	
CH 581088	A	19761029		CH 1973-6886	
DK 140694	В	19791029		DK 1973-2674	19730515
DK 140694	¢	19800519			
SU 929007	A3	19820515		SU 1973-1922039	
NL 7306857	A	19731120		NL 1973-6857	19730516
US 3874277	A	19750401		US 1973-374125	19730627
PRIORITY APPLN. INFO.	. :			1972-48852	19720516
				1972-49695	19720518
				1972-56258	19720605
				1973-25472	19730301
				1972-65256	19720618
				1972-65257	19720618
				1972-65255	19720628
				1972-70124	19720712
				1972-70125	19720712
			JP	1972-77906	19720802
CT For discussion		inted Ca In			

For diagram(s), see printed CA Issue.

Na, K, NaH, KH, or the reaction product of an alkali metal with the corresponding alkali metal hydroxide and calcined Al203 were used as catalysts in the isomerization of cis-chrysanthemic acid esters to the trans-esters (Ir R = Et, Pr, Bu), which were hydrolyzed to trans-chrysanthemic acid (Ir R = H).

827-90-7P 1802-02-4P

ANSWER 132 OF 139 CAPLUS COPYRIGHT 2002 ACS
SSION NUMBER: 1973:452672 CAPLUS
MENT NUMBER: 79:52672

ACCESSION NUMBER: DOCUMENT NUMBER: TITLE:

Stereochemistry. XLIV. Nucleophilic substitution at

AUTHOR (S):

carbon with carbon as leaving group Yankee, Ernest W.; Spencer, Bert; Howe, Norman E.; Cram. Donald J. Dep. Chem., Univ. California, Los Angeles,

CORPORATE SOURCE: Calif., USA SOURCE:

Calif., USA

J. Amer. Chem. Soc. (1973), 95(13), 4220-30

CODEN: JACSAT

JOURNAL

LANGUAGE:

English

GI For diagram(s), see printed CA Issue.

Ab The stereochemical course of nucleophilic reactions with cyclopropane derivatives, [(+)-(8)-1], and ((+)-(2)-1], were studied. The four stereoisomeres, (+)- and (-)-(E)-1 and (+)- and (-)-(2)-1 were prepared in an optically pure state. The relative configurations of the E and Z isomers were established by NMR spectral comparisons, and by K = 20 for

(2)-I .dblarw. (E)-I at 25.degree.. The abs. configurations of the Z diastereoisomers were assigned by converting $\{*\}$ - $\{2\}$ - $\{1\}$ to $\{*\}$ -methyl 2- $\{5\}$ -phenyl-1- $\{5\}$ -cyclopropanecarboxylate, whose abs. configuration

was

known. The relative configurations of (+)-(E)-I and (-)-(Z)-I were established by converting their resp. acids to enantioneric dicyano compds. with a single chiral center. Thus (+)-(E)-I gave (+)-1,1-dicyano-2-(R)-phenylcyclopropane, and (-)-(Z)-I gave (-)-1,1-dicyano-2-(R)-phenylcyclopropane, and (-)-(Z)-I gave (1)-1,1-dicyano-2-(S)-phenylcyclopropane. When heated in HeOH at 126.degree. for 5 days, optically pure (+)-(E)-I underwent methanolysis to give (-)-methyl 2-cyano-4-methoxy-4-phenylbutanoate. This diasteroeisomeric mixt. was converted to (-)-methyl 4-(S)-methoxy-4-phenylbutanoate of 99% optical purity, whose enantiomer was prepd. (max.

rotation) from (+)-(S)-mandelic acid of established configuration.

These
data indicate the methanolysis of (+)-(E)-I went with 99% inversion of configuration. The reaction is interpreted as occurring through solvated

ion-pair intermediates, similar to those obsd. in solvolyses of

open-chain secondary benzyl compds. Methanolysis kinetics were followed at 100

126.degree., and at 126.degree., .DELTA.H.++. = 19.4 .+-. 0.4

LIBT, optically pure $\{-\}$ - $\{2\}$ -I was isomerized $\{3\}$ half-lives) to 99% optically pure $\{-\}$ - $\{8\}$ -I, epimerization occurring solely at the cyanoacetate chiral center. At 34 degree, in DMF-0-I M LiBr, the catalyzed isomerization was .apprx.4000 times faster than thermal

ANSWER 132 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued) isomerization in the same medium, and .apprx.8700 times faster than methanolysis at 34.degree. At 25.degree. in DMF-0.1 H LiBr, (2)-I equilibrated with (E)-I (K = 20). At 39.degree. in DMF, the lithium azide

catalysis of (Z)-I to (E)-I was followed spectroscopically by loss and

appearance of methyl (ester) signals in the nmr. A third methyl signa

gatributed to the anion derived by proton loss from methyl 4-azido-2-cyano-4-phenylbutanoate (II)) appeared after a short time,

went through a max., and then decreased as the signal of (E)-I increased.

From " a reaction mixt., quenched with water at max. intermediate signal,

was isolated II. Treatment of a DMF solution of II with sodium hydride

at 25.degree. gave (E)-I/(Z)-I .apprx.10. The catalyzed isomerization reactions are interpreted as involving consecutive SN2 reactions.

The anionic nucleophile opens the three-membered ring to produce a

anionic nucleophile opens the three members and anionic nucleophile opens the three members are which rotates, and displaces the nucleophile to regenerate the cyclopropane diastereomer.

IT 31002-44-59 31002-46-79
RL: RCT (Reactant): SFN (Synthetic preparation): PREP (Preparation) (prepn. and reaction with diazomethane)
RN 31002-44-5 CAPLUS
CN Cyclopropanecarboxylic acid, 1-cyano-2-phenyl-, (1S-trans)- (9CI) (CA

INDEX NAME)

Absolute stereochemistry.

31002-46-7 CAPLUS Cyclopropanecarboxylic acid, 1-cyano-2-phenyl-, (1R-trans)- (9CI)

Absolute stereochemistry

42332-64-9P
RL: SPN (Synthetic preparation); PREP (Preparation) (prepn. and resoln. of)

ANSWER 132 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

31002-48-9 CAPLUS Cyclopropanecarboxylic acid, 1-cyano-2-phenyl-, (1R-cis)- (9CI) (CA NAME)

Absolute stereochemistry

31002-49-0 CAPLUS Cyclopropanecarboxylic acid, 1-cyano-2-phenyl-, methyl ester, -cis)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 42332-43-4 CAPLUS

L7 ANSWER 132 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)
RN 42332-64-9 CAPLUS
CN Cyclopropanecarboxylic acid, 1-cyano-2-phenyl-, cis- (9CI) (CA INDEX NAME)

Relative stereochemistry.

42332-42-3P 42332-43-4P 42369-70-0E

42332-42-3P 42332-43-4P 42358-70-0P RL: SPN (Synthetic preparation), PREP (Preparation) (prepn. and resolution of) 42332-42-3 CAPLUS Cyclopropanecarboxylic acid, 1-cyano-2-phenyl-, methyl ester, trans-(CA INDEX NAME)

Relative stereochemistry.

42332-43-4 CAPLUS 42369-70-0 CAPLUS Cyclopropanearaboxylic acid, 1-cyano-2-phenyl-, methyl ester, cis-CN (9CI)

(CA INDEX NAME)

Relative stereochemistry.

16205-72-4P 31002-48-9P 31002-49-0P
42332-43-4P
RL: SPN (synthetic preparation); PREP (Preparation)
(prepn. of)
16205-72-4 CAPUUS
Cyclopropanecarboxylic acid, 2-phenyl-, methyl ester, (15,25)- (9CI)

INDEX NAME)

Absolute stereochemistry.

L7 ANSWER 133 OF 139 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1973:452515 CAPLUS
DOCUMENT NUMBER: 79:52515
TITLE: Stereochemistry, XLIII. Racemizations and solvolyses

of cyclopropanes through carbanion-carbonium ion intermediates Yankee, Ernest W.; Badea, Florin D.; Howe, Norman

AUTHOR (S):

Cram, Donald J. Dep. Chem., Univ. California, Los Angeles, CORPORATE SOURCE: Calif., USA SOURCE:

Lif., USA

IRCE:

J. Amer. Chem. Soc. (1973), 95(13), 4210-19

CODEN: JACSAT

JOURNT TYPE:

GUAGE:

Copically pure (+)- and (-)-methyl 1-cyano-2,2
diphenylcyclopropanecarboxylate (I) were prepd.

Redist. km)

Redist. km)

const., kg and (-)-I were studied. In C6H6 and dry DMF only racemization was obad. In HeOH at 100.degree., kr/ks > 102. At 150.degree. in MeOH (.+-.)-I gave 464 methyl 2-cyano-4,4-diphenyl-4-methoxybutanoate and

1,1-diphenylpropene-3-carbonitrile. In AcOH at 100.degree., kr/ks.apprx.0.5, and olefin was the main solvolysis product. In AcOH-0.1 Mp-toluenesulfonic acid, kr/ks.apprx.4 at 100.degree.. At 50.degree.

HCO2H, kr/ks .apprx.15. In DMF, racemization was catalyzed by, and

first order in, free bromide ion from 0.0132 to 0.0380 M LiBr. In AcOH,

, the racemization-solvolysis reactions were p-toluenesulfonic acid catalyzed and followed He. Values of (kr + ks)rel at 126.degree.

: C6H6, 1; DMF, 5; MeOH, 20; AcOH, 25; DMF-0.1 M LiBr, 74; AcOH-0.17 M p-toluenesulfonic acid, .apprx.250; HCO2H, 2 .times. 104. Activation enthalpies (.DELTA.H.++., kcal/mole) were 30.4 in C6H6, 27.7 in DMF, 25.5

in MeOH, 25.9 in AcOH, and 22.9 in DMF-0.1 M LiBr. An isokinetic plot of

OI .DELTA.H.++. against .DELTA.S.++. (.DELTA.H.++. = .DELTA.HO.++. + .beta..DELTA.S.++.) was linear, .DELTA.HO.++. .apprx.36 kcal/mole and .beta. = 762.degree.. For solvolyses of secondary benzyl systems,

.beta. 760.degree.. In HCO2H at 126.degree., .DELTA.H.++. = 22.9

kcal/mole moles. The point for HCO2H was far from falling on the isokinetic plot. The medium effects and changes in distribution of activation energies

nen .DELTA.H.++. and .DELTA.S.++. suggest the racemization reaction occurs through carbanion-carbonium ion reorganization (rotation about methylene-to-cyanoacetate bond), and collapse. Bromide ion catalysis

interpreted as involving interception of ion pairs equilibrating with starting material. The carbanion produced reorganizes and collapses

ANSWER 133 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued) liberate bromide ion. In HCO2H or AcOH-p-toluenesulfonic acid, racemization is interpreted as involving protonation of ion pairs equilibrating with starting material. The carbonium ion produced reorganizes and collapses to liberate a proton. The products of solvolysis are interpreted as arising from the ion pairs by either ure

ure by solvent, or by proton transfers from and to solvent. 4162-97-49 42332-47-89 42332-48-99 42332-51-4P

42332-51-4P
RL: SPN (Synthetic preparation), PREF (Preparation)
(prepn. of)
4162-97-4 CAPLUS
Cyclopropanecarboxylic acid, 1-cyano-2,2-diphenyl-, ethyl ester, 8CI,
(CA INDEX NAME)

42332-47-8 CAPLUS Cyclopropanecarboxylic acid, 1-cyano-2,2-diphenyl- (9CI) (CA INDEX

42332-48-9 CAPLUS Cyclopropanecarboxylic acid, 1-cyano-2,2-diphenyl-, methyl ester (CA INDEX NAME)

42332-51-4 CAPLUS

ANSWER 134 OF 139 CAPLUS COPYRIGHT 2002 ACS (1R,3R)- (9CI) (CA INDEX NAME) (Continued)

Absolute stereochemistry. Rotation (+).

26771-06-2 CAPLUS Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2-methyl-1-propenyl)-, (1S,3R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

26771-11-9 CAPLUS Cyclopropanecatoxylic acid, 2,2-dimethyl-3-(2-methyl-1-propenyl)-, (IR,3S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

41641-25-2 CAPLUS Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2-methyl-1-propenyl)-,

ester, (1R, 3R) - (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 41641-26-3 CAPLUS
CN Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2-methyl-1-propenyl)-,
ethyl

L7 ANSWER 134 OF 139 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1973:159048 CAPLUS
DOCUMENT NUMBER: 78:159048
TITLE: Optically active alkyl chr

78:159048
Optically active alkyl chrysanthemates
Aratani, Tadatoshi; Nakamura, Shuzo
Sumitomo Chemical Co., Ltd.
Ger. Offen., 20 pp.
CODEN: GEXXEX
Patent
German PATENT ASSIGNEE(S): SOURCE:

DOCUMENT TYPE:

LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION: German

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE	
	DE 2240257	A1	19730222	DE 1972-2240257	19720816	
	DE 2240257	C3	19790913			
	DE 2240257	B2	19790118			
	JP 48028457	A2	19730414	JP 1971-62411	19710816	
	JP 52031865	B4	19770817			
	US 3868401	A	19750225	US 1972-276946	19720801	
	IT 969536	A	19740410	IT 1972-69566	19720804	
	BE 787473	A1	19721201	BE 1972-120884	19720811	
	NL 7211012	A	19730220	NL 1972-11012	19720811	
	FR 2149453	A1	19730330	FR 1972-29195	19720811	
	GB 1380111	Α	19750108	GB 1972-38090	19720815	
	CH 568955	A	19751114	CH 1972-12068	19720815	
	DK 133974	В	19760823	DK 1972-4030	19720815	
	CA 993884	A1	19760727	CA 1972-149521	19720816	
PRIC	RITY APPLN. INFO.			JP 1971-62411	19710816	

PRIORITY APPIM. INFO.: 19760727 CA 1972-189321 19720816

AB Optically active Et chrysanthemates were prepd. as a mixt. of cis and trans isomers by the asymmetric reaction of Me2C:CIGCH:CMe2 with N2CHCOZEt

in the presence of a Cu complex contg. a chiral ligand. Yields were 24-67%, and the esters were hydrolyzed to give the corresponding optically active free acid.

IT 2259-14-59 4638-92-0P 26771-06-2P 26771-11-99 41641-25-2P 41641-26-3P 41641-27-4P 41641-25-2P 41641-26-3P RL: SPN (Synthetic preparation); PREP (Preparation) (prepn. of)

RN 2259-14-5 CAPLUS

CN Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2-methyl-1-propenyl)-, (15,3S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

4638-92-0 CAPLUS Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2-methyl-1-propenyl)-,

ANSWER 134 OF 139 CAPLUS COPYRIGHT 2002 ACS ester, (1R,3S)- (9CI) (CA INDEX NAME) (Continued)

Absolute stereochemistry.

41641-27-4 CAPLUS Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2-methyl-1-propenyl)-,

ester, (15,35) - (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 41641-28-5 CAPLUS

L7 ANSWER 135 OF 139
ACCESSION NUMBER:
DCCUMENT NUMBER:
TITLE:
Olefins
AUTHOR(S):
CORPORATE SOURCE:
Sart

CAPLUS COPYRIGHT 2002 ACS
1752290
CAPLUS
Transition metal-catalyzed cyclopropanation of olefins
Paulissen, Robert, Hubert, A. J.; Teyssie, P.
Lab. Macromol. Chem. Org. Catal., Univ. Liege,

Tilman/Liege, Belg. Tetrahedron Lett. (1972), (15), 1465-6 CODEN: TELEAY Journal SOURCE:

DOCUMENT TYPE:

LANGUAGE: Journal
LANGUAGE: English
AB Pd-catalyzed cyclopropanation of styrene with diazo compds. was almost

quant. under mild conditions. Thus, PhCH:CH2 reacted with N2CHCO2Et

25.degree. in the presence of Pd(OAc)2 to give 96% Et cis- and trans-2-phenylcyclopropanecarboxylate; addn. of 3 moles (PhO)3P per

mole Pd (OAc) 2 decreased the cis-trans ratio from 2.0 to 1.0, suggesting a coordination mechanism. N2CH2 reacted similarly with styrene. 5665-36-19 56122-28-6

IТ

Succise-1r 30122-28-87
RL: SPN (Synthetic preparation), PREP (Preparation)
(prepn. of)
5685-38-1 CAPLUS
Cyclopropanecarboxylic acid, 2-phenyl- (6CI, 7CI, 8CI, 9CI) (CA INDEX

NAME)

36122-28-8 CAPLUS

Cyclopropanecarboxylic acid, 2-methyl-2-phenyl-, ethyl ester (7CI, 9CI)

(CA INDEX NAME)

ANSWER 136 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued) (CA INDEX NAME)

RN 35749-14-5 CAPLUS
CN Cyclopropanecarboxylic acid, 2,2-dichloro-1-methyl-, 1-methylethyl

(9CI) (CA INDEX NAME)

ANSWER 136 OF 139 CAPLUS COPYRIGHT 2002 ACS ESSION NUMBER: 1972:153179 CAPLUS TO:153179 ACCESSION NUMBER:

DOCUMENT NUMBER: TITLE:

Catalytic generation of trichloromethyl anion and dichlorocarbene in aqueous medium Makosza, M.; Gajos, I. Inst. Org. Chem. Technol., Tech. Univ., Warsaw, AUTHOR (S): CORPORATE SOURCE:

Pol. SOURCE: Bull. Acad. Pol. Sci., Ser. Sci. Chim. (1972),

33-7 CODEN: BAPCAQ DOCUMENT TYPE:

LANGUAGE:

COMEN: BAPCAQ
JOURNAL
UAGE: Journal
UAGE: English
For diagram(s), see printed CA Issue.
The reaction of CHCl3 with olefins conto. an electron-accepting group
(nitrile, ester, or PhSO2CH:CH2) in 50% NaOH conto. a catalyticant.
PhCH2Et3N+Cl- proceeded via Cl3C- and Cl2C: to give trichloromathyl

dichlorocyclopropyl compds.; the type of product was dependent on the electron-accepting group and on an .alpha.-Me group. Thus, CH2:CHCN gave

40% C13CCH2-CH2CN; CH2:CMeCN gave 6% C13CCH2CH2CN and 14% I (R = CN);

and CH2: CMeCO2Bu gave 52% I (R = CO2Bu). 1447-13-89 1447-14-99 35749-13-49 35749-14-59 RL: SPN (Synthetic preparation); PREP (Preparation)

(preph. of) 1447-13-8 CAPLUS Cyclopropanecarboxylic acid, 2,2-dichloro-1-methyl-, methyl ester RN 1447-10 CN Cyclopropanecarbon, (7CI, 8CI, 9CI) (CA INDEX NAME)

1447-14-9 CAPLUS Cyclopropanecarboxylic acid, 2,2-dichloro-1-methyl- (6CI, 7CI, 8CI, RN CN 9CI)

(CA INDEX NAME)

35749-13-4 CAPLUS Cyclopropanecarboxylic acid, 2,2-dichloro-1-methyl-, butyl ester (9CI)

L7 ANSWER 137 OF 139 CAPLUS COPYRIGHT 2002 ACS ACCESSION NUMBER: 1968:104581 CAPLUS DOCUMENT NUMBER: 68:104581

Reaction of aliphatic diaxocompounds with TITLE:

unsaturated

compounds. XXVI. Synthesis of ethyl esters of 1-methyl-2-(p-tolyl)-1-cyclopropene-3-carboxylic

and

and cis,cis-and
trans,trans-1-methyl-2-p-tolylcyclopropane3-carboxylic acids
AUTHOR(S): Komendantov, M. I., Suvorova, G. N., D'yakonov,

I. A. CORPORATE SOURCE: Leningrad. Gos. Univ., Leningrad, USSR J. Org. Chem. (1968), 4(3), 371-6 CODEN: JOCEAH SOURCE:

DOCUMENT TYPE: Journal

UMENT 1175:
GUIJAGE: Russian
For diagram(s), see printed CA Issue.
Addn. of carbene:CHCO2Et to the triple bond of p-MeC6H4C.tplbond.CMe gave Et 1-methyl-2-(p-tolyl)cycloprop-1-ene-3-carboxylate (II) (R = Et),

which on sapon. gave acid II (R = H). The carbene:CHCO2Et was

generated by decompn. of N2CHCO2Et. Thus, to a hot mixt. of 41 g. I and 0.1 g.

bronze powder 18 g. N2CHCOZEt was added under N at 120.degree.. The

was filtered, I was removed by distn. at 3 mm. Hg. The residue was

to give crude II (R = Et), which was sapond. with KOH/aq. MeOH soln.

give 8.5% II (R = H) m. 126-7.degree.. Esterification of II (R = H)

with

EtOH in the presence of concd. H2SO4 gave 60% II (R = Et), bO.3
89-90.degree., d20 1.0633, n2DD 1.53261, n2DD 1.53836, n2DF 1.55381.
Redn. of II (R = Et) over Pd catalyst gave 94.3% Et
cis,cis-l-methyl-2-(p-tolyl)cyclopropane-3-carboxylate (III) (R = Et),
bO.3 82-3-degree., d20 1.0342, n2DC 1.50948, n2DD 1.51353, n2DF
1.52390.
Synthesis of III (R = Et) (cis-trans mixt.) was also carried out,
analogously to the prepn. of II (R = Et), by treating
cis-p-MecGH4CH:C-Me
(IV) with N2CHCO2Et. Previously unknown IV, bl3 71.5-3.degree., d2D
0.9001, n2DD 1.5355, was obtained by selective hydrogenation of I on
Lindlar (1952) catalyst. Hydrolysis of III (R = Et) gave III (R
= H), m. 129-30degree. (50% EtOH). Isomerization of III (N = H) by
boiling with p-MecGH4SO2C1 and sapon. of the resulting anhydride gave

trans, trans-III (R = H), m. 90-1.degree. (aq. EtOH), which was converted

to the trans, trans-III (R = Et), b0.3 85.degree., d20 1.0146, n20D

1.5112. IT 18397-23-4P 18397-24-5P 18397-25-6P 18397-26-7P

RL: SPN (Synthetic preparation), PREP (Preparation)

ANSWER 137 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

(preph. of)
RN 18397-23-4 CAPLUS
CN Cyclopropanecarboxylic acid, 2-methyl-3-p-tolyl-, ethyl ester, cis,cis-(8CI) (CA INDEX NAME)

Relative stereochemistry.

18397-24-5 CAPLUS Cyclopropanecarboxylic acid, 2-methyl-3-p-tolyl-, cis,cis- (8CI) (CA INDEX NAME)

Relative stereochemistry.

18397-25-6 CAPLUS Cyclopropanecarboxylic acid, 2-methyl-3-p-tolyl-, trans,trans- (8CI) (CA INDEX NAME)

Relative stereochemistry.

18397-26-7 CAPLUS Cyclopropanecarboxylic acid, 2-methyl-3-p-tolyl-, ethyl ester, trans,trans- (8C1) (CA INDEX NAME)

Relative stereochemistry.

ANSWER 138 OF 139 CAPLUS COPYRIGHT 2002 ACS SSION NUMBER: 1968:39156 CAPLUS 68:39156

ACCESSION NUMBER:

DOCUMENT NUMBER:

TITLE: Chrysanthemiic acid. XVIII. New biologically active

acid component related to chrysanthemic acid Matsui, Masanao; Kitahara, Takeshi Univ. Tokyo, Tokyo, Japan Agric. Biol. Chem. (1967), 31(10), 1143-50 CODEN: ABCHA6

AUTHOR (S)

CORPORATE SOURCE: SOURCE:

DOCUMENT TYPE:

Journal LANGUAGE: English

DAGE: English
For diagram(s), see printed CA Issue.
The rethronyl esters of a series of cyclopropanecarboxylic acids were prepd. and tested for toxicity toward the housefly and mosquito.

the following I (R3 = H) were prepd. (R, R1, R2, b.p./mm., and nD/temp.

emp. given): H, H, H, 85.degree. /9, 1.4379/21.degree.; H, Me, H, 95-100.degree. /8, 1.4378/21.degree.; H, H, Me, 100-5.degree. /15

(anilide m. 106.degree.), 1.4400/16.degree. (rethronyl ester n16D 1.5140); Et, H,

Et, H, He, (II) 95-100.degree. /50, 1.4430/17.degree.; H, Me, Me, 72-5.degree. /2 {anilide m. 176.degree.}, -, and Et, Me, Me (III) 75-80.degree. /11,

II and III were obtained via .beta.-methyl-.alpha.-valerolactone, b6 80-3.degree, n250 1.4330, and .beta.-.alpha.-dimethyl-.alpha.-valerolactone, b11 98.degree, resp. I (R = H, R1 = R2 = R3 = M8)

m. 121.degree. (rethronyl ester, n17D 1.5091), was prepd. by

m. 121.degree. (rethronyl ester, niv 1.004), ..., ..., ...

treatment of

Me2C:CMe2 with N2CHCO2Et in the presence of CuSO4 catalyst, and subsequent alk. hydrolysis of the Et ester. Phys. consts. for similarly prepd. I (RI = Me) are given in the table. V (bl0 120-25.degree.; anilide

m. 117-18.degree., n16D 1.4565; rethronyl ester n16D 1.5000) was prepd.

from IV by the Arndt-Eistert reaction. [TABLE OMITTED] Alkylation of

Me2C:CHC02Et with iso-PrBr and NaNH2, and subsequent treatment with

NAOEt, and then sapon. gave Me2C:C(Pr-iso)CO2H, bl1 100.degree., anilide m. 111.degree., n15D 1.4360; rethronyl ester, n22D 1.4931. I (R = H, R1 = R2

- Me, R3 - CO2Me) (VI) (b0.06 120.degree., n13D 1.4634; rethronyl n14D 1.4940) was prepd. by redn. of Et .alpha.-methylsenecioate with LiAlH4: subsequent acetylation gave trimethallyl acetate (VII), b45 88-92.degree., n14D 1.14355. NZCHCOZET was added to VII to give I(R

- Et. R1 = R2 = Me, R3 = CH2OAc), b10 115-22.degree., n14D 1.4470, which

hydrolyzed with an aq. alk. soln. and, without isolation, oxidized wi th

L7 ANSWER 137 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

ANSWER 138 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued) KMnO4 to I (R = H, R1 = R2 = Me, R3 = CO2H), m. 156.degree.. Esterification with CH2N2 gave I (R = R1 = R2 = Me, R3 = CO2Me), b10 100-2.degree., n19D 1.4500. Subsequent half-hydrolysis with KOH-MeOH yielded I (R = H, R1 = R2 = Me, R3 = CO2Me), b0.06 120.degree., n13D 1.4534, rethronyl ester n14D 1.4540. VIII (Feist's acid, m. 199-200.degree.; rethronyl ester, n14D 1.5120) was prepd. by the

method of Goss, et al. (CA 17: 1627). The rethronyl esters were prepd. by converting the acids (except VIII) to the corresponding acyl

chlorides,
followed by esterification with allethrolone (IX) in the presence of
excess CSHSN. VIII was treated with Ac20 to give the anhydride, then
mixed with IX to give a half-ester which was esterified with CH2N2.

rethronyl ester of IV had the greatest toxicity. The correlation

rethronyl ester of IV had the greatest toxicity. The retween chem. structure and biol. reactivity is discussed. I 15599-30-7P 15599-31-8P 15599-33-0P 15599-34-1P 15599-35-2P 15599-38-1P 15599-34-1P 15599-35-2P 15599-38-1P 15599-34-1P 15599-34-1P 15599-34-1P 17219-24-8P 17219-23-9P 17219-24-9P 17219-32-9P 17219-33-9P 17219-34-0P 17219-34-0P 17219-34-0P 17219-34-0P 17219-44-0P 17219-44-9P 17219-44-9P 17219-46-4P 16611-90-0P 16611-91-1P 16719-20-2P 18719-121-3P 2951-39-0P 20759-81-8P RL: SFN (Synthetic preparation); PREP (Preparation) (preps. of)

NN 15599-30-7 CAPLUS
NN Cyclopropanecarboxylic acid, 2-methyl-, --methyl-4-cx0-3-(2-propenyl)-2-cyclopenten-1-yl ester (9CI) (CA INDEX NAME)

$$H_2C = CH - CH_2$$
 0
 0
 0
 0
 0
 0
 0
 0
 0

15589-31-8 CAPLUS

CN Cyclopropanecarboxylic acid, 2,2,3,3-tetramethyl-,
2-methyl-4-oxo-3-(2propenyl)-2-cyclopenten-1-yl ester (9CI) (CA INDEX NAME)

L7 ANSWER 138 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

15589-33-0 CAPLUS KN 15387-33-0 CAPAUS CN Cyclopropanecarboxylic acid, 3-ethyl-2,2-dimethyl-, 2-methyl-4-oxo-3-(2-propenyl)-2-cyclopenten-1-yl ester (9CI) (CA INDEX NAME)

$${\rm H_2C}{=}{\rm CH-CH_2} \bigvee_{0-{\rm C}}^{\rm Me} {\rm Et}$$

15589-34-1 CAPLUS Cyclopropanecarboxylic acid, 2,2,3-trimethyl-, 2-methyl-4-oxo-3-(2-propenyl)-2-cyclopenten-1-yl ester (9CI) (CA INDEX NAME)

$$H_2C = CH - CH_2$$
 $O = CH - CH_2$
 $O = C$

RN 15589-35-2 CAPLUS
CN Cyclopropanecarboxylic acid, 2,2-dimethyl-3-propyl-,
2-methyl-4-oxo-3-{2propenyl)-2-cyclopenten-1-yl ester (9CI) (CA INDEX NAME)

15591-18-1 CAPLUS Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(1-methylethyl)-,

17219-24-8 CAPLUS Cyclopropanecarboxylic acid, 2,2,3-trimethyl- (8CI, 9CI) (CA INDEX

17219-29-3 CAPLUS Cyclopropanecarboxylic acid, 3-ethyl-2,2-dimethyl- (8CI) (CA INDEX

RN 17219-32-8 CAPLUS CN Cyclopropanecarboxylic acid, 2,2-dimethyl-3-propyl- (8CI) (CA INDEX NAME) 17219-32-8 CAPLUS

L7 ANSWER 138 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued) 2-methyl-4-oxo-3-(2-propenyl)-2-cyclopenten-1-yl ester (9CI) (CA INDEX NAME)

15641-58-4 CAPLUS Cyclopropanecarboxylic acid, 2,2,3,3-tetramethyl- (6C1, 8CI, 9CI) (CA INDEX NAME)

RN CN (CA 17214-86-7 CAPLUS Cyclopropanecarboxylic acid, 2,2,3-trimethyl-, ethyl ester (8CI, 9CI)

17214-87-8 CAPLUS Cyclopropanecarboxylic acid, 2,3-dimethyl-, ethyl ester (7CI, 8CI, (CA INDEX NAME)

ANSWER 138 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

17219-33-9 CAPLUS Cyclopropanecarboxylic acid, 2,2-dimethyl-3-propyl-, ethyl ester (8CI) (CA INDEX NAME)

RN 17219-34-0 CAPLUS CN Cyclopropanecarboxylic acid, 3-isopropyl-2,2-dimethyl- (8CI) (CA INDEX NAME)

RN 17219-3. CN Cyclopropanecar. (7CI, 8CI) (CA INDEX NAME) 17219-35-1 CAPLUS Cyclopropanecarboxylic acid, 3-isopropyl-2,2-dimethyl-, ethyl ester

17219-37-3 CAPLUS [1,1'-Bicyclopropyl]-2-carboxylic acid, 3,3-dimethyl- (9CI) (CA INDEX NAME)

17219-38-4 CAPLUS [Bicyclopropyl]-2-carboxylic acid, 3,3-dimethyl-, ethyl ester (8CI)

INDEX NAME)

17219-39-5 CAPLUS Cyclopropanecarboxylic acid, 2-ethyl-2,3,3-trimethyl- (8CI, 9CI) (CA INDEX NAME)

RN 17219-40-8 CAPLUS CN Cyclopropanecarboxylic acid, 2-ethyl-2,3,3-trimethyl-, ethyl ester (8CI)

(CA INDEX NAME)

17219-41-9 CAPLUS Cyclopropanecarboxylic acid, 2,2,3-trimethyl-3-phenyl- (8CI, 9CI)

ANSWER 138 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

RN 18611-84-2 CAPLUS
CN Cyclopropanecarboxylic acid, 2,2-dimethyl-,
2-methyl-4-oxo-3-(2-propenyl)2-cyclopenten-1-yl ester (9CI) (CA INDEX NAME)

$$H_2C = CH - CH_2$$

$$O = CH - CH_2$$

$$Me$$

$$Me$$

18611-90-0 CAPLUS
Cyclopropanecarboxylic acid, 2-ethyl-2,3,3-trimethyl-,
2-methyl-4-oxo-3-(2-propenyl)-2-cyclopenten-1-yl ester (9CI) (CA

$$H_2C = CH - CH_2$$

Re

 $O = CH - CH_2$
 $O = CH_2$
 $O = CH - CH_2$
 $O = CH_2$

18611-91-1 CAPLUS
Cyclopropanecarboxylic acid, 2,2,3-trimethyl-3-phenyl-,
2-methyl-4-oxo-3-(2-propenyl)-2-cyclopenten-1-yl ester (9CI) (CA

INDEX

L7 ANSWER 138 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

17219-42-0 CAPLUS Cyclopropanecarboxylic acid, 2,2,3-trimethyl-3-phenyl-, ethyl ester RN CN (8CI)

(CA INDEX NAME)

RN 17219-44-2 CAPLUS Cyclopropanecarboxylic acid, 2-[(acetyloxy)methyl]-2,3,3-trimethyl-,

ester (9CI) (CA INDEX NAME)

17219-45-3 CAPLUS
1,2-Cyclopropanedicarboxylic acid, 1,3,3-trimethyl- (8CI, 9CI) (CA

NAME)

17219-46-4 CAPLUS
1,2-Cyclopropanedicarboxylic acid, 1,3,3-trimethyl-, diethyl ester

(CA INDEX NAME)

ANSWER 138 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

18718-20-2 CAPLUS

Cyclopropanecarboxylic acid, 2,3-dimethyl-, ester with 2-allyl-4-hydroxy-3-methyl-2-cyclopenten-1-one (8CI) (CA INDEX NAME)

$$H_2C = CH - CH_2$$
 $O = CH - CH_2$
 $O = CH_2$
 O

18718-21-3 CAPLUS
[Bicyclopropyl]-2-carboxylic acid, 3,3-dimethyl-, ester with
2-allyl-4-hydroxy-3-methyl-2-cyclopenten-1-one (8CI) (CA INDEX NAME)

$$H_2C$$
 = CH - CH_2 O - C

28518-39-0 CAPLUS 1,2-Cyclopropanedicarboxylic acid, 1,3,3-trimethyl-, monomethyl ester (8CI) (CA INDEX NAME)

CM 1

CRN 17219-45-3 CMF C8 H12 O4

CM 2

CRN 67-56-1 CMF C H4 0

H3C-OH

ANSWER 138 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued) 28758-81-8 CAPLUS 1,2-Cyclopropanedicarboxylic acid, 1,3,3-trimethyl-, methyl ester, with 2-ally1-4-hydroxy-3-methyl-2-cyclopenten-1-one (8CI) (CA INDEX NAME) CM 1 CRN 29605-88-7 CMF C9 H12 O2

CM 2

17219-45-3 C8 H12 O4

CM 3

CRN 67-56-1 CMF C H4 0

н₃с-он

ANSWER 139 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued) 30 min. to 16.8 g. PC15 in 200 ml. anhyd. ather at -3.degree. (very exothermic reaction). The mixt. was stirred overnight at room temp. filtered, and the solid added to ice and extd. with CHC13 to give 31 min. m. 154.degree. (benzene-ligroine). The ether filtrate was washed with cold NaHCO3 soln., water, dried, and concd. to give 77% of a mixt. (b0.5 58-9.degree., n20D 1.4645) of XVI and XVII in approx. 4:1 ratio, and XVIII, b0.7 61.degree., n24D 1.4615. XVIII decompd. to XVI and XVII subjected to gas chromatog. Similarly, XIV was treated with PC15 in presence of pyridine (1.6 ml. pyridine/1.6 g. PCl5), and the ether the chromatographed on alumina to give 73% of a 3:2 mixt. of XYI and XVII (petroleum ether eluate) and 11% XIX, m. 111.degree. (C6H6-ligroine). Treatment of XIV with tosyl chloride in pyridine at 0.degree., then at room temp. and 1 hr. at 100.degree. gave 48% XVI-XVII and 50% XVI and XVII have the cis configuration. Redn. of XVI and XVII with

refluxed 2 hrs. to give a 9:1 mixt. of XVI and XVII. Sapon. of AVI-AVII
(3:2) (24 hrs. reflux with KOH in ethylene glycol) gave 76% of a mixt. (b0.4 97-8.degree.) of I and II. Esterification of this mixt. with CH2N2

catalyst gave cis-dihydrochrysanthemonitrile. A mixt. of XVI and XVII (310 mg.), 5 mg. p-toluenesulfonic acid (XX), and 5 ml. xylene

CH2N2

gave a mixt. contg. 9% iso-cis-, 45% iso-trans-, 8% cis-, and 38% trans-methyl chrysanthemate. Redn. of this mixt. gave cis- and trans-methyl dihydrochrysanthemate. The I-II mixt. (0.6 g.) refluxed 1.5

hrs. in 15 ml. xylene with 5 mg. XX gave 0.54 g. pure II. To 3,3,6-crimethyl-6-hydroxyhptanenitrile (10 g.) in 4 ml. pyridine was added at 0.degree. 7.4 g. methanesulfonyl chloride, the mixt. cooled overnight, added to ice, and extd. with ether to give the methanesulfonster.

(XXI). XXI (1.25 g. crude) in 3 ml. dimethylformamide was added dropwi to 0.24 g. 50% NaH in mineral oil and 5 ml. dimethylformamide, the

cooled, added to ice, and extd. with ether to give dihydrochrysanthemonitrile (reaction temp., time (hrs.), % yield, and cis/trans ratio given): 20.degree., 5, 86, 60/40; 65.degree., 5, 86, 53/47; 100.degree., 2, 75, 46/54; 125.degree., 1/4, 70, 33% cis, 37% trans, 30% unidentified. Redn. of 95 mg. of I-II mixt. with Adams catalyst gave XXIIa (X = H, R = H), p-phenylphenacyl ester m. 100-1.degree. (MeOH). A soln. of 5 g. II in 50 ml. anhyd. ether . at satd.

0.degree. with HCl and cooled overnight gave 95% XXIIa (X = Cl, R =

ANSWER 139 OF 139 CAPLUS COPYRIGHT 2002 ACS SION NUMBER: 1967:85867 CAPLUS ACCESSION NUMBER: DOCUMENT NUMBER: TITLE: 66:85867

66:85867
Synthesis and fragmentation of substituted bicyclo-[3,1,0]-2-hexanones. II.
(++-)-iso-trans-Chrysanthemic and (++-)-trans-chyrsanthemic acids
Julia, Sylvestre, Julia, Marc, Linstrumelle,

AUTHOR (S):

Ecole Natl. Super. Chim., Paris, Fr. Bull. Soc. Chim. Fr. (1966), (11), 3499-507 CODEN: BSCFAS Gerard CORPORATE SOURCE: SOURCE:

DOCUMENT TYPE: LANGUAGE:

MENT TYPE: Journal
UAGE: French
For diagram(s), see printed CA Issue.
cf. preceding abstr. A new acid, (.+-.)-iso-trans-chrysanthemic acid

and (.+-.)-trans-chrysanthemic acid (II) were prepd. Dimethyl-vinyl carbinol (86 g.) was added to 47 g. 53% NaH in mineral cil and 1.2 l. benzene, the mixt. refluxed 5 hrs. cooled to -15.degree., and 104 ml. isobutyryl chloride in 50 ml. benzene added at 0 to 4.degree. The

was left overnight at room temp., added to water, and extd. with

ruo give 108 g. III, bl0 39.degree., n22.5D 1.4113. III (78 g.) was added dropwise to 24 g. 538 NaH in mineral oil and 160 ml. toluene at 110.degree., cooled, 10 ml. MeOH added, and the mixt. kept 2 hrs. at 110.degree., cooled, 10 ml. MeOH added, and the mixt. added to ice, washed with ether, and acidified with

2N HCl to give 64 g. IV, b0.6 91.degree., n23.5D 1.4487, amide m. 73.degree. (ether-petroleum ether). IV was also prepd. from 2,2,5-trimethyl-4-hexen-1-al (V) and Ag2O (85% yield) and by sapon. of 2,2,5-trimethyl-4-hexen

was prepd. by the method of Stork and Dowd (CA 59, 7383a). isobutyronitrile (VII) to a mixt. of PhLi and Et2NH in ether

treatment of this mixt. With isoprene hydrobromide hydrate (VIII) gave 62% VI,

86.degree., n18D 1.4351. VI was also prepd. in 96% yield from EtMgBr, Et2NH, VII, and VIII and in 87% yield from VII, isoprene hydrochlor,

NaNH2 in benzene. A soln. of 12 g. Me iodide in 20 ml. ether was

slowly to 1.1 g. Li in 20 ml. ether. To this was added 2.6 g. IV in

ml. ether, the mixt. stirred overnight, ice-water added, and extd.

ether to give 2.32 g. IXa (X = Me)(X), b18 84.degree., n20D 1.44-66,

prepd. in 76% yield by treatment of VI with EtMgI in toluene. IV and (COC1)2 in ligroine gave IXa (X = C1) (XI). XI and CH2N2 gave IXa (X

CHN2) (XII). XII in cyclohexane treated with Cu powder at reflux XIII, bl2 75.degree., n22.5D 1.4595, oxime (XIV) m. 90-1.degree. (ether-petroleum ether). XIV (8.61 g.) was added in small portions

ANSWER 139 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued) (XXIII). A mixt. of ethyl and tert-amyl chrysanthemates treated with

gave XXIII ethyl ester (XXIV) and XXIII in an amt. corresponding to

amyl ester. Similarly, trans-ethyl chrysanthemate and HCl in ether

90% XXIV, b0.8 86.degree., n21D 1.4558, also prepd. from XXIII and diazoethane. A mixt. of 74 ml. 1.5N Na tert-amylate in benzene and

g. ethyl chrysanthemate (XXV) (60% trans-40% cis) was refluxed 4 hrs., cooled, added to ice and extd. with ether to give 90% trans-esters

contg.

3% cis-XXV, however the trans-esters contained 33% trans-XXV and 67% tert-amyl chrysanthemate (XXVI). The trans esters refluxed with alc.

gave chrysanthemic acid and pure XXVI, b0.8 85-8.degree., n24D 1.4576. XXV (30 g.) refluxed 72 hrs. in a soln. of 20.7 g. Na in 300 ml. alc.

25.5 g. trans-XXV, b0.6 70.degree., n20D 1.4556 (contg. 8% cis-ester). XXIV treated with bases, e.g. tert-BuOK, NaH in dimethylformamide,

XXIV treated with pages, e.g. test and solven in a constant in the phietz, or NaOEt, gave 70% XXV and 30% of the iso-isomer I. XXIV heated in C6H4C12 at 180.degree, gave the same results. XXIII heated with K in Et3C6H at 20.degree, then heated 2 hrs. at 90.degree. (Brown, et al., CA 50, 14749e) gave 94% of a mixt. of 85% I and 15% II. I, m.

42-4.degree, amide m. 117-18.degree. (benzene), was sepd. from II by 2 recrystns.

pentane. Similarly, XXIV (4 hrs. at 85.degree.) gave 90% of a mixt. contg. 25% II and 75% I. 705-16-8P 7377-84-6P 13899-97-3P 13902-23-9P 13902-33-6P 13902-35-7P

14280-93-40

RL: SPN (Synthetic preparation); PREP (Preparation)

(prepn. of) 705-16-8 CAPLUS

703-10-6 CAPIDS
(Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2-methyl-1-propenyl)-,
(1R,3R)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

7377-84-6 CAPLUS Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2-methyl-1-propenyl)-, ester. (1R.3S)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

L7 ANSWER 139 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

RN 13899-97-3 CAPLUS
CN Cyclopropanecarboxylic acid,
3-(2-chloro-2-methylpropyl)-2,2-dimethyl-,
trans- (8CI) (CA INDEX NAME)

Relative stereochemistry.

RN 13902-29-9 CAPLUS
CN Cyclopropanecarboxylic acid,
3-(2-chlor-2-methylpropyl)-2,2-dimethyl-,
methyl ester, trans- {8CI} (CA INDEX NAME)

Relative stereochemistry.

RN 13902-34-6 CAPLUS CN Cyclopropanecarboxylic acid, 3-(2-chloro-2-methylpropyl)-2,2-dimethyl-, ethyl ester, cis- (8CI, 9CI) (CA INDEX NAME)

Relative stereochemistry.

RN 13902-35-7 CAPLUS

L7 ANSWER 139 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)
CN Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2-methylpropenyl)-,
tert-pentyl ester (8CI) (CA INDEX NAME)

RN 14280-93-4 CAPLUS

---Logging off of STN---

=>

Executing the logoff script...

≈> LOG Y

COST IN U.S. DOLLARS	SINCE FILE	TOTAL
	ENTRY	SESSION
FULL ESTIMATED COST	613.93	894.70
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE	TOTAL SESSION
CA SUBSCRIBER PRICE	ENTRY -86.11	-86.11

STN INTERNATIONAL LOGOFF AT 08:56:19 ON 18 JUL 2002

L8 ANSWER 44 OF 46 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1980:42269 CAPLUS
DOCUMENT NUMBER: 92:42269
TITLE: Corelation between steric structure and

chiroptical properties of 1-desoxy-2-keto sugar derivatives

of

serotonin Mester, L.; Amaya, A. Amit; Berenger, G.; AUTHOR(S):

Mester, M. CORPORATE SOURCE: 91190, Inst. Chim. Subst. Nat., CNRS, Gif-sur-Yvette,

Journal of Carbohydrates, Nucleosides, SOURCE: Nucleotides

Nucleotides

(1979), 6(3), 247-54

CODEN: JCNNAF, 155N: 0094-0585

DOCUMENT TYPE: Journal
LANGUAGE: English
AB 13C NMR and CD of the title sugar derivs. show the hexose derivs. to

present in .beta.-pyranose structure, while the pentose and

methylpentose derivs. are in .alpha.- or .beta.-furanose form. A distinct optical

has been established for both types of serotonin sugar derivs. The tetrose deriv. follows the general optical rule, established for C-1 and

and

C-2 substituted open chain sugar derivs.

1T 72328-40-6 72328-41-7

RL: RCT (Reactant); RACT (Reactant or reagent)

(C-13 NNR and CD of, steric structure in relation to)

RN 7238-40-6 CAPLUS

CN .beta.-D-erythro-2-Pentulofuranose,

1-deoxy-1-[[2-(5-hydroxy-1H-indol-3-y1)ethyl]amino] - (SCI) (CA INDEX NAME)

Absolute stereochemistry.

72328-41-7 CAPLUS .beta.-D-Tagatofuranose, 1,6-dideoxy-1-[[2-(5-hydroxy-1H-indol-3-yl)ethyl]amino]- (SCI) (CA INDEX NAME)

L8 ANSWER 44 OF 46 CAPLUS COPYRIGHT 2003 ACS Absolute stereochemistry. (Continued)

RN 72328-48-4 CAPLUS
CN .beta.-L-threo-2-Pentulofuranose,
1-deoxy-1-[[2-{5-hydroxy-1H-indo1-3-y1}]ethyl]amino]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

72328-51-9 CAPLUS
.alpha.-L-Tagatofuranose, 1,6-dideoxy-1-[[2-{5-hydroxy-1H-indol-3-y1}ethy1]amino]- {9CI} (CA INDEX NAME)

Absolute stereochemistry.

RN 72328-52-0 CAPLUS
CN .alpha.-L-erythro-2-Pentulofurancse,
1-deoxy-1-[[2-(5-hydroxy-1H-indol-3-y1)ethyl]amino]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

ANSWER 44 OF 46 CAPLUS COPYRIGHT 2003 ACS

72328-45-1 72328-46-2 72328-47-3
72328-48-4 72328-51-9 72328-52-0
72328-53-1 72328-54-2
RI: PRP (Properties)
(Cotton effect of)
72328-45-1 CAPLUS
.beta.-L-Tagatofuranose, 1,6-dideoxy-1-[{2-(5-hydroxy-lH-indol-3-yl)ethyl]amino]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 72328-46-2 CAPLUS CN .beta.-L-erythro-2-Pentulofuranose, 1-deoxy-1-[[2-(5-hydroxy-1H-indol-3-y1)ethy1]amino]- (9CI) (CA INDEX NAME)

72328-47-3 CAPLUS
.beta.-D-threo-2-Pentulofuranose, 1-deoxy-1-{[2-(5-hydroxy-1H-indol-3-y]ethyl]amino]- (9CI) (CA INDEX NAME)

ANSWER 44 OF 46 CAPLUS COPYRIGHT 2003 ACS (Continued)

RN 72328-53-1 CAPLUS CN .alpha.-D-threo-2-Pentulofuranose, 1-deoxy-1-[[2-(5-hydroxy-lH-indol-3-y1)ethyl]amino]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 72328-54-2 CAPLUS
CN .alpha.-L-threo-2-Pentulofuranose,
1-deoxy-1-[[2-(5-hydroxy-]H-indol-3y1]ethyl]amino]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

IT 72328-49-5 72328-50-8
RL: RCT (Reactant); RACT (Reactant or reagent)
(NMA and CD of, steric structure in relation to)
RN 72328-49-5 CAPLUS
CN .alpha.-D-erythro-2-Pentulofuranose,
1-deoxy-1-[[2-(5-hydroxy-1H-indol-3-y1)ethyl]amino]- (9CI) (CA INDEX NAME)

